LIFE SCIENCE AREAS OF NATURAL AND SCIENTIFIC INTEREST IN SITE DISTRICT 7-6

A Review and Assessment of Significant Natural Areas in Site District 7-6

September 1984

Ontario Ministry of Natural Resources

OFER 8405

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September 1984

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For convenience, this report may be referred to as OFER # 8405. It is one of a number of Open File Ecological Reports comprised of reconnaissance surveys and inventories of ecological areas in Ontario.

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Reference copies of this report are available in the above offices, and the Natural Resources Library, 4th Floor Whitney Block, Room 4540, 99 Wellesley Street West, Toronto, Ontario M7A 1W3. Copies have been sent to university libraries in Southern Ontario.

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PREFACE

In 1977, the Parks and Recreational Areas Program of the Ontario Ministry of Natural Resources, with special funding approved by Management Board of Cabinet, initiated a provincial survey of natural areas in connection with park system planning. A parallel initiative focused on the identification of geological sites representative of Ontario's earth science diversity. The mandate for these surveys stems from the protection objective of the Ontario Provincial Parks Policy (1978), which is "to protect provincially significant elements of the natural and cultural landscapes of Ontario".

The overall objective of the natural areas survey is to identify a series of ecological areas that comprise the spectrum of natural landscapes, environments and biotic communities in Ontario. This objective issues from a Cabinet endorsed guideline of the 1978 parks policy which recognizes the role of provincial parks in protecting "a system of features representative of Ontario's life science history and diversity". With this aim, technical guidelines help to direct the selection, documentation and evaluation of natural areas throughout the site regions and site districts of the province.

Between 1980 and 1982, evaluations of remnant natural areas were undertaken in the site districts within the Central and Southwestern Regions of the Ministry. Through these assessments, the finest natural areas were chosen to complement natural features already represented within a series of Nature Reserves proposed through an earlier review of the provincial parks and park reserves (Lindsay and Hanna, 1980). In addition, natural areas identified through this survey complement the Candidate Nature Reserves already proposed for the Niagara Escarpment Planning Area (Parks Planning Branch, 1976).

The present report was issued as a draft in 1980 under the title "An Identification and Evaluation of Life Science Candidate Nature Reserves in Site District 7-6". Now in the final edition, it is one of a series of such reports which have been completed to date and are available as "Open File Ecological Reports". The findings of these reports have provided the basis for many of the "Recommended Provincial Parks" announced by the Minister in June 1983, and the "Areas of Natural and Scientific Interest" designated in the District Land Use Guidelines also released at that time.

Although evolution of the land use planning process since 1981 has produced new terminology incorporating natural areas, this nomenclature is not used in this report. Rather, natural areas are referred to as either Candidate Nature Reserves or as Significant Sites. This is distinct from the new terminology, as used in the District Land Use Guidelines (OMNR, 1983), which groups natural areas and geological sites as Areas of Natural and Scientific Interest (ANSI s).

According to the District Land Use Guidelines, ANSI s may vary in level of significance. The most significant of these, those referred to as Candidate Nature Reserves in this report, make the greatest contribution to the Ministry's protection objective and are listed in the District Land

Use Guidelines. ANSI s which contribute to a lesser degree to the provincial protection objective are referred to as Significant Sites in this report and are considered to be at least regionally significant. The policy statement for Areas of Natural and Scientific Interest is appended.

Site district evaluations in the Central and Southwestern Regions of the Ministry were carried out be three biologists -- K. M. Lindsay, R. Hanna and R. Klinkenberg. Lindsay coordinated and directed the work, and evaluated Site Districts 6-5, 6-7 and 7-2. Hanna examined Site Districts 6-2, 6-6, 6-8, 6-13, 7-4 and 7-6; Klinkenberg examined Site Districts 7-1 and 6-1. While all three biologists shared common objectives and collaborated in developing evaluation techniques, each undertook field work and evaluation using methods appropriate to their respective site districts.

Each site district report includes an analysis and discussion of the natural features and natural areas of the site district, a discussion of the methodology, recommendations for further work and possible methods of natural areas protection. Check-sheets for Candidate Nature Reserves are appended, as are brief descriptions of other natural areas in the site district.

The information collected during the site district assessments forms the foundation of a provincial natural areas data base. This data base is being updated as new information is obtained. It is an important component of the planning process at district, regional and provincial levels of the Ministry. Readers are invited to add to the data base, either by contributing to studies conducted by the Ministry, or through information contributed to other groups seeking to protect natural areas.

Although site district assessments were designed to identify those natural areas which contribute mainly to the protection objective of the Ministry, this information should prove useful to regional and local governments, conservation authorities and other organizations involved with the identification and protection of significant natural areas. Protection of natural areas may be achieved in several ways, including the purchase of sites by outside agencies. Where natural areas designated as ANSI s occur on public lands managed by the Ministry, it will ensure that the land uses and activities which occur provide for the protection of identified values. On private lands, the Ministry will, through cooperation with others, attempt to ensure that landowners are aware of the significant features on their properties and seek the owners' cooperation in protecting such features.

ACKNOWLEDGEMENTS

Many people contributed to the preparation of the site district reports. H. J. Featherston, H. Pronk, J. Griffin and G. Rodgers (Parks and Recreational Areas Section, Central Region, Ontario Ministry of Natural Resources) played a major role in the administration of this project, providing continual and much appreciated logistic and technical support. G. Murphy and E. Martelle (Parks and Recreational Areas Section, Southwestern Region) also contributed substantially to this project. Technical direction for the project came from an informal committee composed of the Parks Coordinators of both regions, H. J. Featherston, G. Murphy and E. Martelle; and Regional Park Planners, G. Rodgers, W. McNab and I. Seddon; and T. J. Beechey, (Life Science Coordinator, Parks and Recreational Areas Branch, Queen's Park). Discussions on technical matters with T. J. Beechey, W. McNab and G. Rodgers proved especially valuable. This report was prepared under contract to J. E. Hanna Associates Inc.; the Ontario Ministry of Natural Resources, however, undertook all aspects associated with report production.

Throughout the course of this project, P. Terpstra's assistance with background research, data analysis, map preparation, field work and report editing has been invaluable. L. Sajnovic supervised report typing with proficiency and looked after many other details.

E. Hanna (J. E. Hanna Associates Inc.) discussed freely the method of site selection, provided information on specific sites and commented on drafts of this report. His ideas and support are appreciated and are reflected in the context of this report. R. Klinkenberg contributed valuable information on important sites in the London area.

The draft Site District 7-6 report was reviewed by selected externel experts familiar with the geographical area under study in Site District 7-6. Comments made by Dr. P. Eagles, Dr. S. Hilts, and Mr. John Small are appreciated and have been added to the data base for ANSI's at district and regional offices and the main office of the Ministry. These reviews generally confirmed the selection of ANSI's made by this site district study.

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1. Candidate Nature Reserves and Significant Sites in Site District 7-6

SUMMARY

A broad till plain, with intervening morainic ridges and spillway valleys, gradually rising 115 m to a small drumlinized till plain in the northeast forms the prominent landscape pattern of Site District 7-6. The site district extends nearly the width of the southwestern Ontario peninsula, from east of Lake Huron to just west of the Niagara Escarpment. Its northern boundary parallels a line south of Stratford and its southern limit extends south of London to within 18 km of Lake Erie. The majority of the site district, excluding the frequent swampy spillway areas, is intensively used for agricultural activities such as livestock, dairy cattle, cash crops, vegetables and pasture land. Included are smaller urban centres like Woodstock, Tillsonburg, St. Thomas, Galt, Guelph, Paris and Brantford, which provide local produce markets, and London, which is the major market and commercial centre for most of southwestern Ontario.

An overview of the physiographic regions and component vegetation-landform features in Site District 7-6 suggested that the main features which currently remain in a relatively undisturbed or natural state are: pond/bog complexes, swamps, kettle-kame hill complexes, upland forests on till plain, till moraine and spillway deposits, and river valley systems. There are three provincial parks and park reserves with nature reserve potential in Site District 7-6 - Trillium Woods Provincial Nature Reserve, Cranberry Bog Park Reserve and Komoka Park Reserve. The following fourteen candidate nature reserves were selected to represent the major vegetation-landform features of the site district.

Pond/Bog complexes	Mud Lakes (40I/14 965540) Oliver's Bog (40P/8 580974) Trotter's Lake (40P/2 280820) Cranberry Bog Park Reserve (40P/8 527935)
Kettle-Kame Hills Complexes	Lakeside Swamp (40P/3 990830) Chesney Bog (40P/2 290860)
Upland Forests on Till Plain	Unopened 12th Woodlots (40P/2 005765) Trillium Woods Provincial Nature Reserve (40P/2 180677)
Upland Forests on Till Moraine	Byron Woodlot (40I/14 715560) Alp's Woods (40P/8 50985)
Upland Forests on Spillway Deposits	Spottiswood Lakes (40P/8 500900)
River Valley Systems	Grand River Forests (40P/8 520900) Komoka Park Reserve and Adjacent Lands (40I/14 660550)

All fourteen candidate nature reserves are recommended for protection. Seven of the fourteen are highlighted because of their outstanding contribution: Mud Lakes, Oliver's Bog, Lakeside Swamp, Chesney Bog, Unopened 12th Woodlots, Byron Woodlot and Grand River Forests

1. INTRODUCTION

Site District 7-6, a part of Site Region 7, extends nearly the width of the southwestern Ontario peninsula from just east of Grand Bend to just west of Hamilton. Its northern boundary parallels a line 8 km (4.8 miles) south of Stratford while the southern perimeter extends south of London to within 18 km (10.8 miles) of Lake Erie (Figure 1).

Hills (1959) defined a site region as an area of land within which the response of the vegetation to the features of the landform follows a consistent pattern. Each site region is further subdivided according to characteristic physiographic zones which set apart fairly large areas; these Hills called site districts. Originally, Site District 7-6 was considered a part of Site Region 6 and was shown as part of Site District 6-1. Based on further vegetation research, Hills modified the boundary between the two regions in 1964 because the southern portion of 6-1 contained the southern vegetation characteristics typical of Site Region 7. As a result, this southern section was reclassified as part of Site Region 7, and has been denoted as Site District 7-6 for park planning purposes. The text itself was never changed. Hills (1959) described Site Region 6, including Site District 6-1, as a gently rolling to rolling terrain of ice laid materials deeply covering the bedrock over 80% of the area. Local plains of lacustrine deposits also occur. Site District 6-1 was described as a plain characterized by smooth clay areas and gently rolling loam moraines.

The categorizations and boundaries proposed by Hills do not coincide precisely with those of other authors. In particular, Chapman and Putnam (1973) recognize nine distinct physiographic regions, parts of which fall within Site District 7-6. The majority of the site district is contained within the Mount Elgin Ridges, Oxford Till Plain and Stratford Till Plain. The Mount Elgin Ridges consist of a succession of ridges and vales of till moraine and spillway gradually rising northeast, from 246 m a.s.l. (800 feet a.s.l.) to 308 m a.s.l. (1000 feet a.s.l.) to meet the Oxford Till Plain. Three well-marked valleys formed by glacial meltwater streams dissect the gently rolling drumlinized topography of the Oxford Till Plain. Scattered kame hills break the landform pattern. A broad ground moraine consisting of clayey soils interrupted by several terminal moraines typifies the Stratford Till Plain, which lies to the north of the Mount Elgin Ridges and the west of Oxford Till Plain. The site district is flanked on both sides by several morainic ridges, portions of the Horseshoe Moraines. The spillways lying between these ridges exhibit broad sand and gravel terraces and swampy floors. In the Thames River Valley, which separates the Stratford Till Plain and Mount Elgin Ridges, is found a series of small sand deposits called the Caradoc Sand Plains. Other minor components of Site District 7-6 include the Flamborough (limestone) Plain, Norfolk Sand Plain, Huron Slope and Waterloo Hills.

Table 1 presents an analysis of the landscape of Site District 7-6 and its remaining natural features. The physiographic regions that lie within the site district are listed in order of importance. For each physiographic region, component landforms are given, based on Chapman and Putnam, 1972. As well, the percentage and types of natural areas remaining is estimated based on a review of the 1:50,000 topographic maps covering the site district.

Following this overview of the site district, five percent of the site district was found to be in a relatively natural and undisturbed state. The most common remnant natural features in the study area are pond/bog complexes, swamps, kettle-kame hill complexes, upland forests on till plain, till moraine and spillway, and river valley systems.

A number of these features are represented by parks and park reserves with nature reserve potential. However, some features are missing, while others require additional areal representation. Consequently, a nature reserve site selection program was undertaken to identify additional nature reserve sites. The methodology of the natural features overview, identification of features not represented by parks, site selection procedure and brief discussion of the results and recommended sites follows.

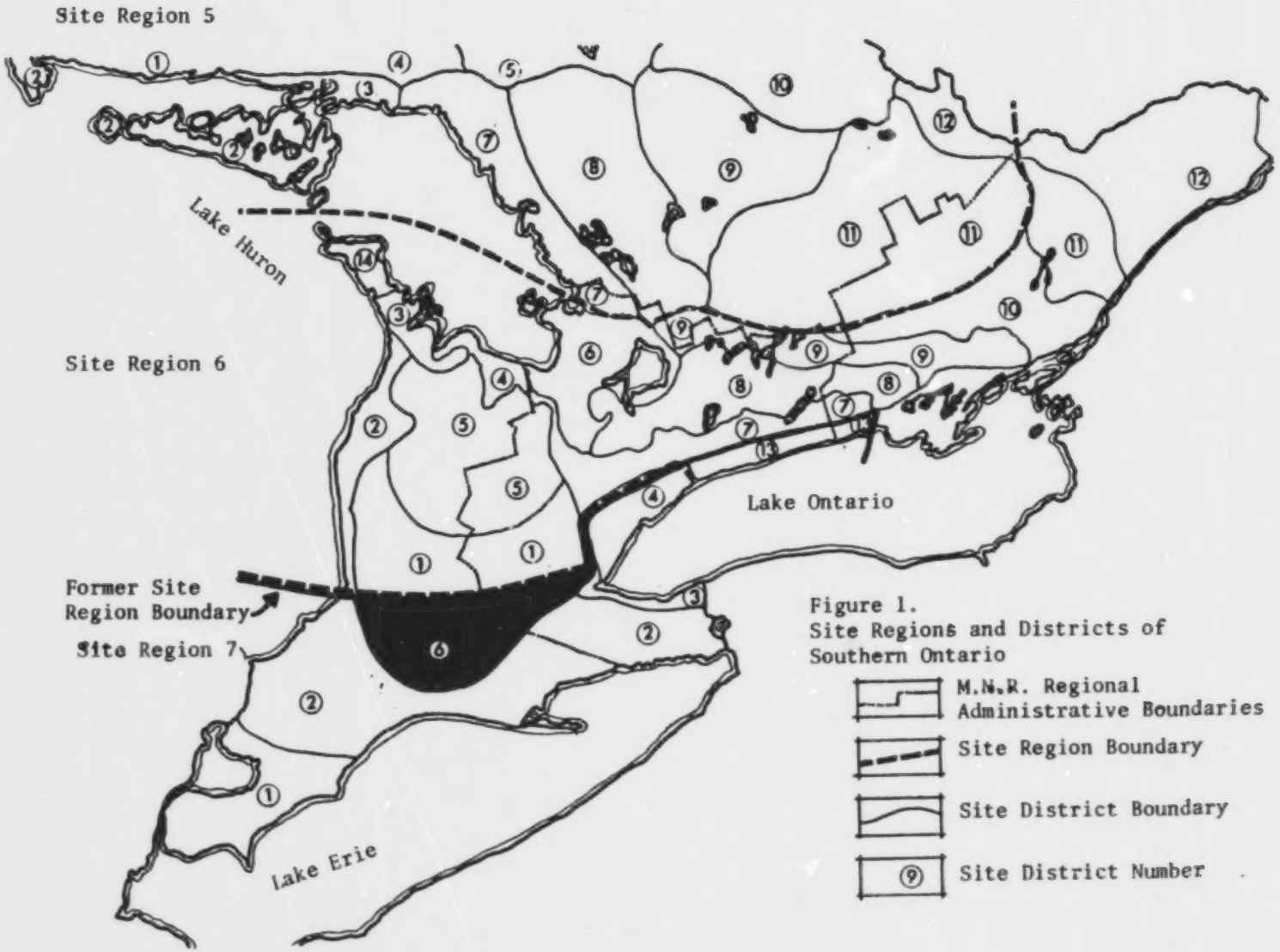

Figure 1.
Site Regions and Districts of
Southern Ontario

TABLE 1. SUMMARY OF THE NATURAL FEATURES ANALYSIS AND NATURE RESERVE SELECTION PROCEDURE BY PHYSIOGRAPHIC REGION AND LANDFORM FOR SITE DISTRICT 7-6

ANALYSIS OF NATURAL FEATURES OF SITE DISTRICT					FEATURES REPRESENTED BY CANDIDATE NATURE RESERVES IN PROVINCIAL PARKS/RESERVES			FEATURES MISSING FROM PROVINCIAL PARKS AND PARK RESERVES	CANDIDATE NATURE RESERVES SELECTED TO REPRESENT THE MISSING FEATURES
Physiographic Regions wholly or partly within Site District	Proportion of Site District covered by Physiographic Region	Landforms found within Physiographic Region	Proportion of Physiographic Region occupied by each Landform	Types of Natural Features remaining on these Landforms and proportion remaining in a Natural Condition	Park Name	Feature(s)	Approx. Area		
Mount Elgin Ridges (also in 7-2)	25	undrumlinized till plain	35	-5% -small scattered woodlots (Kettle Creek, St. Thomas)	-	-	-	-upland woodlots	-Mud Lakes (401/14 965540)
		till moraine	35	-10% -small scattered woodlots -few small wetlands (Pine Pond)	-	-	-	-upland woodlots -pond/bog complexes -swamps	-Byron Woodlot (401/14 715560) -Trotters Lake (40P/2 280820)
		spillway	29	-25% -scattered woodlots and wetlands (north of Tillsonburg, Hwy. 401 and 73) -river valleys	-	-	-	-swamps -upland woodlots	-Dorchester Swamp (401/14 980570)
		clay plains	1	-	-	-	-	-	
Oxford Till Plain	20	drumlinized till plain	75	-10% -small scattered woodlots -no forested drumlins	Trillium Woods Provincial Nature Reserve	-uplands -sugar maple/beech/ash	10 ha (25 acres)	-upland woodlots	-Trillium Woods Provincial Nature Reserve (40P/2 180677) -Unopened 12th Woodlots (40P/2 005765)

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Physiographic Regions wholly or partly within Site District	Proportion of Site District covered by Physiographic Region	Landforms found within Physiographic Region	Proportion of Physiographic Region occupied by each Landform	Types of Natural Features remaining on these Landforms and proportion remaining in a Natural Condition	Park Name	Feature(s)	Approx. Area		
Oxford Till Plain cont'd		spillway	15	-1% -wetlands -most river valleys cleared	-	-	-	-swamps	-
		undrumlinized till plain	4	-1% -tiny, scattered woodlots	-	-	-	-upland woodlots	-
		kame moraine	3	-1% -kettle-kame	-	-	-	-kettle-kame hill complexes	-Lakeside Swamp (40P/3 990830) -Chesney Bog (40P/2 290860)
		clay plain	2	-5% -tiny woodlots	-	-	-	-upland woodlots	-
		till moraine	1	-5% -creek valleys	-	-	-	-wetlands	-
Stratford Till Plain (also in 6-1, 6-5)	20	undrumlinized till plain	70	-5% -small scattered woodlots	-	-	-	-upland woodlots	-
		till moraine	15	-5% -small scattered woodlots	-	-	-	-upland woodlots	-
		spillway	15	-5% -small scattered woodlots -river valleys	-	-	-	-upland woodlots -river valley systems	-

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Physiographic Regions wholly or partly within Site District	Proportion of Site District covered by Physiographic Region	Landforms found within Physiographic Region	Proportion of Physiographic Region occupied by each Landform	Types of Natural Features remaining on these Landforms and proportion remaining in a Natural Condition	Park Name	Feature(s)	Approx. Area		
Horseshoe Moraines (also in 6-1, 6-2, 6-5 and 7-2)	15	till moraine	50	-1% -small scattered woodlots -small wetlands	-	-	-	-upland woodlots -pond/bog complexes	-Oliver's Bog (40P/8 580974) -Alps Woods (40P/8 500960)
		spillway	25	-5% stream valleys -40% kettle-kame (south of Galt)	Cranberry Bog Park Reserve	-kettle bog -low shrub-graminoid bog, marsh, shrub thickets, meadow marsh, open water	8 ha (20 acres)	-river valley systems -upland woodlots -pond/bog complexes	-Cranberry Bog Park Reserve (40P/8 527935) -Spottiswood Lakes (40P/8 520900) -Grand River Forests (40P/8 520900)
		undrumlinized till plain	10	-1% -tiny woodlots	-	-	-	-upland woodlots	-
		bevelled till plain	10	-0%	-	-	-	-	-
		sand plain	3	-1% -Ausable River sections	-	-	-	-river valley systems	-
		clay plain	2	-1% -tiny woodlots	-	-	-	-upland woodlots	-
		organics	1	-	-	-	-	-	-

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ANALYSIS OF NATURAL FEATURES OF SITE DISTRICT					FEATURES REPRESENTED BY CANDIDATE NATURE RESERVES IN PROVINCIAL PARKS/RESERVES			FEATURES MISSING FROM PROVINCIAL PARKS AND PARK RESERVES	CANDIDATE NATURE RESERVES SELECTED TO REPRESENT THE MISSING FEATURES
Physiographic Regions wholly or partly within Site District	Proportion of Site District covered by Physiographic Region	Landforms found within Physiographic Region	Proportion of Physiographic Region occupied by each Landform	Types of Natural Features remaining on these Landforms and proportion remaining in a Natural Condition	Park Name	Feature(s)	Approx. Area		
Caradoc Sand Plains (also in 7-2)	10	sand plain	75	-5% -some steep river valleys and scattered woodlots	Komoka Park Reserve	-river valley -poplar-willow floodplain; oak-hickory, oak-maple-ash and hemlock slope forests; cedar-tamarack swamp; prairie grassland	121 ha (300 acres)	-river valley systems	Komoka Park Reserve and adjacent lands (401/14 670550)
		spillway	25	-2% -stream valleys (Thames River)	-	-	-	-river valley systems	-
		undrumlinized till plain	1	-	-	-	-	-	-
Flamborough Plain (also in 6-1)	5	limestone plain	100	-25% -several wooded tracts	-	-	-	-upland woodlots	-
Norfolk Sand Plain (also in 7-2)	3	sand plain	75	-1% -forest tract	-	-	-	-upland woodlots	-
		till moraine	25	-0%	-	-	-	-	-

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Physiographic Regions wholly or partly within Site District	Proportion of Site District covered by Physiographic Region	Landforms found within Physiographic Region	Proportion of Physiographic Region occupied by each Landform	Types of Natural Features remaining on these Landforms and proportion remaining in a Natural Condition	Park Name	Feature(s)	Approx.Area		
Huron Slope (also in 6-2 and 6-1)	1	bevelled till plain	100	-1% -few scattered woodlots	-	-	-	-upland woodlots	-
Waterloo Hills (also in 6-1 and 6-5)	1	spillway	50	-	-	-	-	-wetlands	-
		kame moraine	50	-	-	-	-	-kettle-kame hill complexes	-

2. METHODOLOGY

The following section outlines the four steps undertaken during the natural area overview and site selection procedure. The limitations of the approach are also discussed.

(i) Natural Features Analysis

The Protection Objective of Ontario's Provincial Park Policy is "to protect provincially significant elements of the natural and cultural landscape of Ontario". Following an assessment by site district of the life science features with nature reserve potential in the Parks System, it was necessary to determine which features were not represented by parks and which features would need to be included to meet the protection objective of this policy.

Site districts, as defined by Hills (1959), served as the sole basis for identifying and selecting vegetation-landform features which needed to be represented in the Parks System to preserve the diversity of landscape types present. However, the physiographic regions proposed by Chapman and Putnam were also considered primarily at the overview stage (step one). By segregating the site district in this way, the identification of the full spectrum of features to be represented was facilitated. Throughout the text of this report, reference is made to these physiographic regions. However, site selection was based entirely on the analysis of the dominant vegetation-landform features of the site district irrespective of their association with the physiographic regions. Reference to these physiographic regions is intended simply to allow the reader to orient and compare the sites selected according to the system proposed by Chapman and Putnam.

Topographic (N.T.S. 1:50,000) and physiographic (Chapman and Putnam, 1972, 1:253,440) maps were used to estimate the percentage of Site District 7-6 within each physiographic region. Within each sector of the physiographic region in the site district, the areal frequency of the various vegetation-landform features were recorded. For each vegetation-landform feature, estimates of the percentage of the area remaining in a natural and undisturbed state were made and tabulated.

Features represented by Parks and those missing from the system were listed. Sections (ii) to (iv) of the Methodology outline the steps followed to document and select the best available examples of the dominant vegetation-landform features within the site district. Candidate nature reserves were chosen to represent the missing features identified through the natural features analysis. Table 2 tabulates the time spent on each step.

(ii) Review of Background Information:

Existing information on file at the Ministry of Natural Resources, Central Region, Parks and Recreation Section was compiled according to physiographic regions and landforms by P. Terpstra. This information is presented in Appendix B. The major sources of information for this site district were Environmentally Sensitive Areas (ESA) reports, Ministry of Natural Resources Sensitive Areas Files, the International Biological Program (IBP) survey sheets and internal reports.

TABLE 2. TIME ALLOCATION FOR NATURAL FEATURES ANALYSIS AND NATURE RESERVE SITE SELECTION PROCEDURE FOR SITE DISTRICT 7-6

STEP	DAYS
1. Natural Feature Analysis (overview of natural landscape and identification of life science features not represented by Parks).	5
2. Review of Background Information (review of topographic maps, physiographic maps, airphotos and data; selection of sites for field checking).	6
3. Field Reconnaissance (by automobile and foot).	4
4. Site Evaluation (final review, comparison and evaluation of significant sites for candidate nature reserves; Environmental Data Card preparation and mapping).	7

Following the review of topographic and physiographic maps and the background data, representative life science sites with nature reserve potential were selected for detailed airphoto analysis. Where no information was available, sites were selected strictly from maps. The number of potential sites was reduced through airphoto analysis and a list was prepared for field investigation.

The following five criteria formed the basis for all phases of site selection and evaluation. Sites illustrating similar features were compared in terms of representation, diversity, condition, ecological considerations and special features.

(a) Representation - Representation of the remaining natural features of the site district was of primary importance. The dominant vegetation-landform features of the site district were given special emphasis.

(b) Diversity - Diversity was appraised in terms of the number and range of vegetation-landform features or habitats found within a site. The representation value of a site usually increases in proportion to the diversity of habitats contained within the site.

(c) Condition - The degree of past disturbance to the main feature(s) of the site was assessed. Logging, grazing, fire, drainage, flooding, mining, housing developments, transportation and utility corridors and recreation were some of the impacts that were considered. Because all of southern Ontario has been effected by human disturbance to varying degrees, none of the sites selected are pristine.

(d) Ecological Considerations - Ecological considerations, such as size, shape, buffering from adjacent land use and watershed location were also weighed. Generally, larger sites, which would be more likely to maintain stable and diverse natural communities, were chosen over smaller sites. However, for certain life science features only small remnant sites are left, especially in the extreme southern part of Ontario (Site Region 7). In such cases, sites that were close together or linked were ranked higher that widely spaced, small areas. Recent work on island biogeography (Diamond, 1975) suggests that species extinctions are less likely to occur in larger sites, linked sites or closely spaced sites than in small, isolated sites. Headwater areas and watershed units where some degree of control over inputs would be possible were given special attention.

(e) Special Features - Allowance was made for special features such as the presence of rare and endangered species, species of phytogeographical interest (significant species), nesting sites for colonial birds such as heronries, and concentrations of breeding and/or migratory waterfowl. The special features criterion was of secondary importance; it was applied only after representation, diversity, condition and ecological considerations had been assessed. Because detailed and complete biological data was lacking for most sites, caution was exercised in comparing the special features of sites with different levels of background data.

(iii) Field Reconnaissance

A total of four days, August 14-15, 18-19, 1980, were spent field checking Site District 7-6. The study team consisted of the author and field assistant, P. Terpstra. A preselected route was travelled by automobile and to a lesser extent by foot; during this period, fifty-two potential sites were field checked. Each site was investigated for one half to two hours and included an examination of as many different biological communities and site types as time permitted. General topography, soil types, site drainage, vegetation communities, fauna, condition, surrounding landscape features and land use were noted and recorded.

(iv) Site Evaluation

Following field reconnaissance, each site was reviewed, compared and evaluated within its vegetation-landform unit. Poor quality sites were deleted and the remainder were denoted as significant sites (see Glossary).

Following further evaluation, candidate nature reserves (see Glossary) were selected from the list of significant sites. Representation, diversity, condition and ecological considerations were weighted equally in the evaluation procedure, while special features were considered less important. A further analysis of candidate nature reserves led to the identification of the best quality sites to represent each dominant vegetation-landform type. Environmental Data Cards were written up for each significant site and one page nature reserve check-sheets were prepared for each candidate nature reserve (Appendix A). Location and boundaries of each significant site were mapped on 1:50,000 topographic maps and all data were placed on file at the Ministry of Natural Resources, Central Region, Parks and Recreation Section.

The preparation of this report involved the compilation of existing data on the natural areas of Site District 7-6. This data included available information on Environmentally Sensitive Areas in the site district, airphoto review, topographic map review, and some contact with individuals knowledgeable about the site district. A limited amount of time was devoted to field checking of sites in order to assess their current condition and the degree of representation offered by each.

The emphasis of this study was directed towards vegetation-landform features. Therefore, areas of high quality wildlife and fisheries habitat, and special sites such as concentrations of rare or endangered flora and fauna, are generally missing unless otherwise a component of a representative vegetation-landform feature.

3. CANDIDATE NATURE RESERVES

The preliminary overview process identified seven dominant vegetation-landform features remaining in a relatively natural and undisturbed state. The seven types include pond/bog complexes, swamps, kettle-kame hill complexes, upland forests on till plain, till moraine and spillway, and river valley systems. An additional limestone plain uplands type was identified, however, due to its minor areal role in the site district and time constraints, sites were not selected.

Table 1 summarizes the natural features analysis and nature reserve selection procedure according to physiographic region and vegetation-landform feature. The results of the analysis are presented in the final column entitled Candidate Nature Reserves Selected to Represent the Missing Features. Of the fifty-two areas initially selected, forty were chosen as significant sites and, of these, fourteen were chosen as candidate nature reserves (Table 3). The locations of the fourteen candidate nature reserves are shown on Figure 2.

Of the fourteen candidate nature reserves selected, seven offer the best representation of the dominant features. The best river valley system is the Grand River Forests, an extensively continuous, relatively undisturbed and highly diverse forested river corridor. One of the least disturbed kettle bogs is Oliver's Bog; it harbours a high diversity of wetland types illustrating a classical successional transition from open water bog to upland fringe. Another important pond/bog complex is Mud Lakes which contains a moderate diversity of relatively undisturbed wetland vegetation including graminoid bog, which is rare in this region. Lakeside Swamp offers a typical example of kettle-kame hills, containing a moderately high diversity of relatively undisturbed pond and upland forest types. Chesney Bog provides another sample of kettle-kame hills with a significantly large kettle bog containing floating *Sphagnum* mat and treed bog progressing to swamp and uplands. Byron Woodlot and the Unopened 12th Woodlots are two relatively large undisturbed and moderately diverse upland forest tracts situated on till moraine and till plain landforms, respectively.

The other seven candidate nature reserves selected are Cranberry Bog Park Reserve, Trotters Lake, Dorchester Swamp, Trillium Woods, Alps Woods, Spottiswood Lakes and Komoka Park Reserve. Komoka Park Reserve, the second river valley site selected, is a typical forested river corridor with relatively undisturbed vegetation types. Cranberry Bog Park Reserve and Trotters Lake are two other pond/bog complexes. Trotters Lake is the largest of the four candidate nature reserves selected to represent this feature and contains a good diversity of pond and surrounding lowland/swamp vegetation. Although disturbed by recent changes in water level, Cranberry Bog still offers a good example of kettle bog and pond vegetation with upland fringe. Dorchester Swamp, despite its highly disturbed nature, represents a typical swamp with a highly diverse array of plant community types. Trillium Woods provides representation of a typically small and relatively undisturbed upland till plain forest. Like Byron Woodlot, Alps Woods is a series of short steep hills of moderately diverse upland forest, however, much of the area is managed for timber production. Finally a series of relatively undisturbed steep sided sand hills, with intermittent ponds in the valleys between, characterize Spottiswood Lakes, a good example of upland forests on spillway deposits.

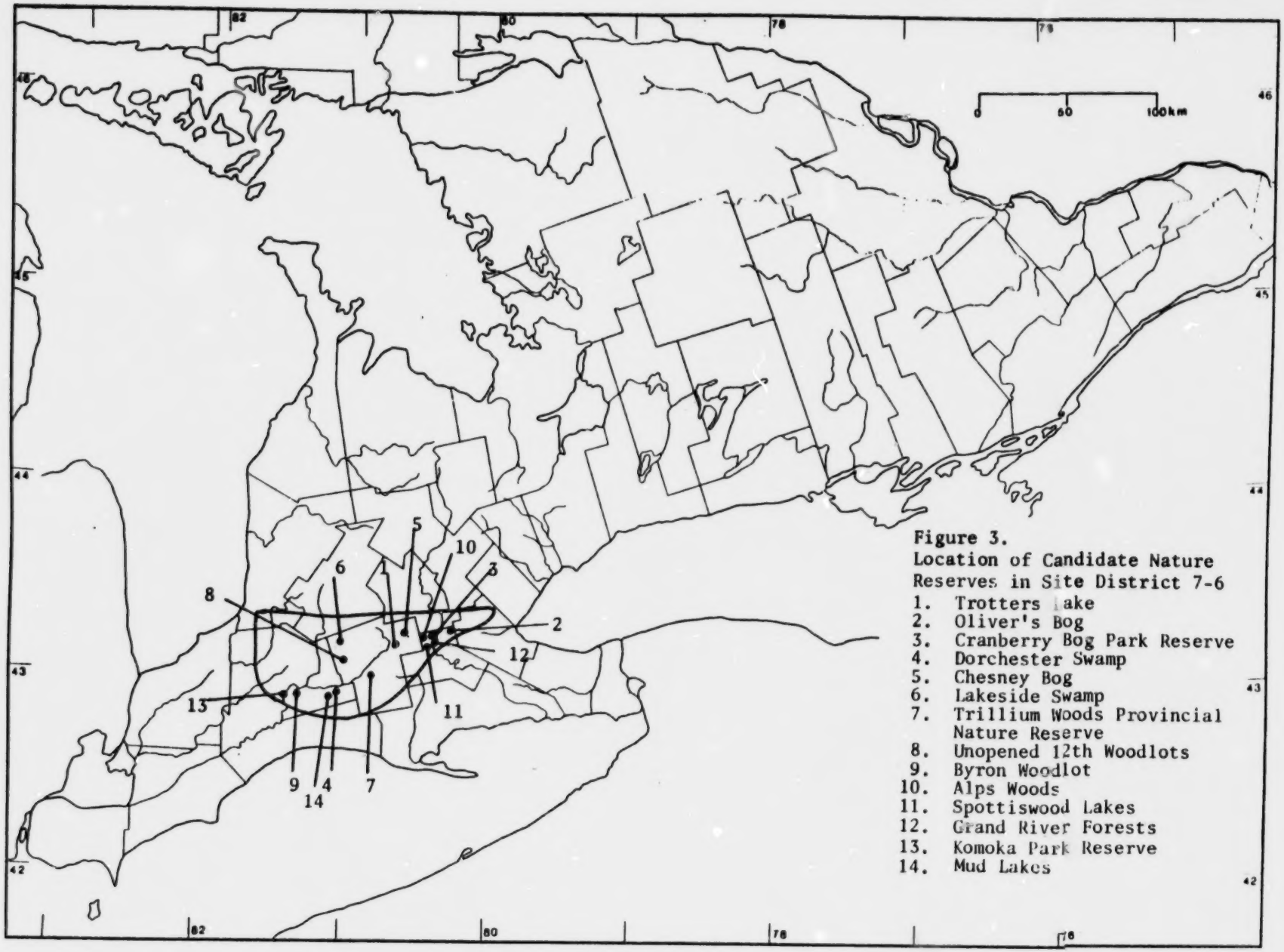

Figure 3.
Location of Candidate Nature Reserves in Site District 7-6

1. Trotters Lake
2. Oliver's Bog
3. Cranberry Bog Park Reserve
4. Dorchester Swamp
5. Chesney Bog
6. Lakeside Swamp
7. Trillium Woods Provincial Nature Reserve
8. Unopened 12th Woodlots
9. Byron Woodlot
10. Alps Woods
11. Spottiswood Lakes
12. Grand River Forests
13. Komoka Park Reserve
14. Mud Lakes

TABLE 3: LIST OF SIGNIFICANT SITES AND CANDIDATE NATURE RESERVES IN SITE DISTRICT 7-6

VEGETATION-LANDFORM FEATURE AND PHYSIOGRAPHIC REGION	SIGNIFICANT SITE	CANDIDATE NATURE RESERVE
WETLANDS		
Pond/Bog Complex		
Mount Elgin Ridges - till plain	Foster Ponds (40I/14 925545) Mud Lakes (40I/14 960545)	Mud Lakes (40I/14 960545)
Mount Elgin Ridges - till moraine	Trotter's Lake (40P/2 280280) Pine Pond (40P/2 307820) Fowlers Pond (40P/2 290810)	Trotter's Lake (40P/2 307820)
Oxford Till Plain - spillway	Buck Pond (40P/2 285840)	
Horseshoe Moraines - till moraine	Oliver's Bog (40P/8 580974) Beake Pond (40P/8 545905)	Oliver's Bog (40P/8 580974)
Horseshoe Moraines - spillway	Cranberry Bog Park Reserve (40P/8 527935) Little Turnbull Lake (40P/8 465920) McCrae Lake (40P/8 467933) Dean's Lake (40P/8 540945) Bannister/Wrigley Lakes (40P/8 500935)	Cranberry Bog Park Reserve (40P/8 527935)
Swamp		
Mount Elgin Ridges - till moraine	Dorchester Swamp (40I/14 980570)	Dorchester Swamp (40I/14 980570)
Mount Elgin Ridges - spillway	Benwall Swamp (40P/2 325790)	
Oxford Till Plain - spillway	Plattsville Flats (40P/7 330920) Wolverton Swamp (40P/7 330890	

TABLE 3: LIST OF SIGNIFICANT SITES AND CANDIDATE NATURE RESERVES IN SITE DISTRICT 7-6

VEGETATION-LANDFORM FEATURE AND PHYSIOGRAPHIC REGION	SIGNIFICANT SITE	CANDIDATE NATURE RESERVE
UPLAND/WETLAND		
Kettle-kame		
Oxford Till Plain - kame	Chesney Bog (40P/2 290860) Lakeside Swamp (40P/3 990830) Cobble Hills (40P/3 290860	Chesney Bog (40P/2 290860)
UPLANDS		
Till Plain		
Mount Elgin Ridges - till plain	Salford Woods (40I/15 120585)	
Oxford Till Plain - drumlinized till plain	Trillium Woods Provincial Nature Reserve (40P/2 180677) Carn's Sugar Maple Forest (40P/2 980730) Unopened 12th Woodlots (40P/2 005765)	Trillium Woods Provincial Nature Reserve (40P/2 180677) Unopened 12th Woodlots (40P/2 005765)
Stratford Till Plain - till plain	Telfer Woodlot (40P/3 670650) Ivan Woodlot (40P/3 645630)	
Huron Slope - bevelled till plain	Khiva Conservation Forest (40P/5 475950)	
Till Moraine		
Mount Elgin Ridges - till moraine	Byron Woodlot (40I/14 715560) Zenda Tract (40I/15 230600)	Byron Woodlot (40I/14 715560)
Horseshoe Moraines - till moraine	Hungry Hill (40P/8 480940) Alp's Woods (40P/8 500966)	Alp's Woods (40P/8 500966)
Spillway		
Horseshoe Moraines - spillway	Spottiswood Lakes (40P/8 500900 Sudden Tract (40P/8 515945)	Spottiswood Lakes (40P/8 500900)

TABLE 3: LIST OF SIGNIFICANT SITES AND CANDIDATE NATURE RESERVES IN SITE DISTRICT 7-6

VEGETATION-LANDFORM FEATURE AND PHYSIOGRAPHIC REGION	SIGNIFICANT SITE	CANDIDATE NATURE RESERVE
Caradoc Sand Plain - spillway	Delaware Woodlot (40I/14 660500)	
RIVER VALLEY SYSTEMS		
Stratford Till Plain - spillway	St. Ives River Valley (40P/3 855790)	
Horseshoe Moraines - spillway	Grand River Forests (40P/8 520900) Nith River Forests (40P/1 485810) Kilworth Valleylands (40P/1 675567)	Grand River Forests (40P/8 590900)
Caradoc Sand Plain - spillway	Kains Road River Valley (40I/14 700580)	
Caradoc Sand Plain - sandplain	Komoka Park Reserve and adjacent lands (40I/14 670550)	Komoka Park Reserve and adjacent lands (40I/14 670550

4. CONCLUSIONS

A total of fourteen candidate nature reserves were selected to represent the typical vegetation-landform features of Site District 7-6. They include four pond/bog complexes - Mud Lakes, Oliver's Bog, Trotters Lake and Cranberry Bog Park Reserve, a swamp - Dorchester Swamp, two kettle-kame hill complexes - Lakeside Swamp and Chesney Bog, two upland forests on till plain - Trillium Woods Provincial Nature Reserve and the Unopened 12th Woodlots, two upland forests on till moraine - Byron Woodlot and Alps Woods, one upland forest on spillway deposits - Spottiswood Lakes, and two river valley systems - Grand River Forests and Komoka Park Reserve. Priority should be given to Mud Lakes, Oliver's Bog, Lakeside Swamp, Chesney Bog, the Unopened 12th Woodlots, Byron Woodlot and Grand River Forests because of their outstanding contribution.

These candidate nature reserves require further research to determine the feasibility of their protection over the long term. Land-use designation of the site and surrounding land and other environmental factors (i.e., size of watershed, etc.) effecting present and future stability should be assessed. Candidate nature reserves which can be feasibly managed in a stable condition over the long term, should either be directly acquired by public agencies such as the Ministry of Natural Resources, Conservation Authorities, the Nature Conservancy and/or individual naturalist clubs. Alternatively, the present owners should be encouraged to work cooperatively to protect and manage the area through private land agreements. The significant sites also are valuable ecological areas which should receive protection through district and municipal land-use planning.

No sites were identified to represent the limestone plain uplands due to their minor areal importance in Site District 7-6 and time constraints.

GLOSSARY

Areas of Natural and Scientific Interest (ANSI): ANSI s are areas of land and water containing natural landscapes or features which have been identified as having values related to protection, natural heritage, scientific study or education. ANSI s may vary in level of significance. The most significant of these, Candidate Nature Reserves in the site district reports, may contribute to the achievement of the Ministry's protection objective. Those which do not contribute to the provincial protection objective are referred to as Significant Sites in the site district report.

Candidate Nature Reserve: Candidate nature reserves are sites selected on a systematic basis to represent the natural features and landscapes of Ontario and complement other protected zones in the provincial park system. Candidate nature reserves contain the best examples of the landform and vegetation features of each site district; features that may be of widespread or restricted occurrence within the site district. They are selected after comparison and evaluation of significant sites sharing similar features. Each candidate nature reserve possesses sufficient ecological integrity, buffering capacity and size that protection appears to be a viable management strategy.

Physiographic Region: Chapman and Putnam (1973) described and mapped fifty-two minor physiographic regions within southern Ontario. These physiographic regions are areas with recognizable local landform patterns. Map 1 outlines the physiographic regions that fall wholly or partially within the site district.

Significant Site: A site of at least regional significance and representative of the landform and vegetation features of the site district. Chosen after reviewing the background information available on sites of biological importance, airphoto analysis and field checking of selected areas. After final evaluation and comparison of similar significant sites, some were chosen as candidate nature reserves. However, all significant sites are recommended for protection through the land-use planning process.

Site District: A subdivision of a site region, with a characteristic pattern of physiographic features (Hills, 1959). Site districts are small scale map units that segregate substantial areas from each other on the basis of broad landform patterns. Refer to Figure 1.

Site Region: An area of land within which the response of the vegetation to the features of the landform follows a consistent pattern (Hills, 1959). Refer to Figure 1.

APPENDIX A: CANDIDATE NATURE RESERVE CHECK-SHEETS AND ENVIRONMENTAL DATA CARDS FOR SIGNIFICANT SITES

	Page Number
WETLANDS	
POND/BOG COMPLEXES	
Mud Lakes (40I/14 965540) - CNR[1]	25
Trotters Lake (rpP/2 280820) - CNR	27
Cranberry Bog Park Reserve (40P/8 527935) - CNR	29
Oliver's Bog (40P/8 580974) - CNR	31
Foster Ponds (40I/14 925545)	33
Buck Pond (40P/2 285840)	34
Fowlers Pond (40P/2 307820)	34
Pine Pond (40P/2 307820)	34
Little Turnbull Lake (40P/8 465920)	35
McCrone Lake (40P/8 467933)	35
Bannister and Wrigley Lakes (40P/8 500935)	35
Dean's Lake (Long Lake) (40P/8 540945)	36
Beake Pond (Taylor's Pond) (40P/8 545905)	36
SWAMPS	
Dorchester Swamp (40I/14 980570) - CNR	39
Wolverton Swamp (40P/7 330885)	41
Benwall Swamp (40P/2 325790)	41
Plattsville Flats (40P/7 330920)	42
UPLANDS/WETLANDS	
KETTLE-KAME HILL COMPLEXES	
Lakeside Swamp (40P/3 990830) - CNR	43
Chesney Bog (40P/2 290860) - CNR	45
Cobble Hills (40P/3 940740)	47
UPLANDS	
TILL PLAIN	
Unopened 12th Woodlots (40P/2 005765) - CNR	49
Trillium Woods Provincial Nature Reserve (40P/2 180677) - CNR	51
Khiva Conservation Forests (40P/5 475950)	53
Ivan Woodlot (40P/3 645630)	53
Telfer Woodlot (40P/3 670650)	53
Carn's Sugar Maple Forest (40P/2 180730)	54
Salford Woods (40I/15 120585)	55
TILL MORAINE	
Byron Woodlot (40I/14 715560) - CNR	57
Alps Woods (Dryden Tract) (40P/8 500965) - CNR	59
Zenda Tract (40I/15 230600)	61
Hungry Hill (40P/8 480940)	61
SPILLWAY	
Spottiswood Lakes (40P/8 500900) - CNR	63
Delaware Woodlot (40I/14 660500)	65
Sudden Tract (40P/8 515945)	65

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[1] CRN indicates a candidate nature reserve.

	Page Number
RIVER VALLEY SYSTEMS	
Grand River Forests (40P/8 520900) - CNR	67
Komoka Park Reserve and adjacent lands (40I/14 660550) - CNR	69
Kains Road River Valley (40I/14 700580)	71
Kilworth Valleylands (40I/14 675567)	71
St. Ives River Valley (40P/3 855790)	72
Nith River Forests (40P/1 485810)	72

ONTARIO NATURE RESERVES PROGRAM - LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Mud Lakes (=Dingman Lakes)	St. Thomas	40I/14	965540

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Middlesex

LOCALITY: 5.5 km SSE of Dorchester

TOWNSHIP / LOTS / CONCESSIONS: Mud Lakes - North Dorchester Township

AREA: ca. 170 acres ca. 70 ha

OWNERSHIP:

ADMINISTRATION:

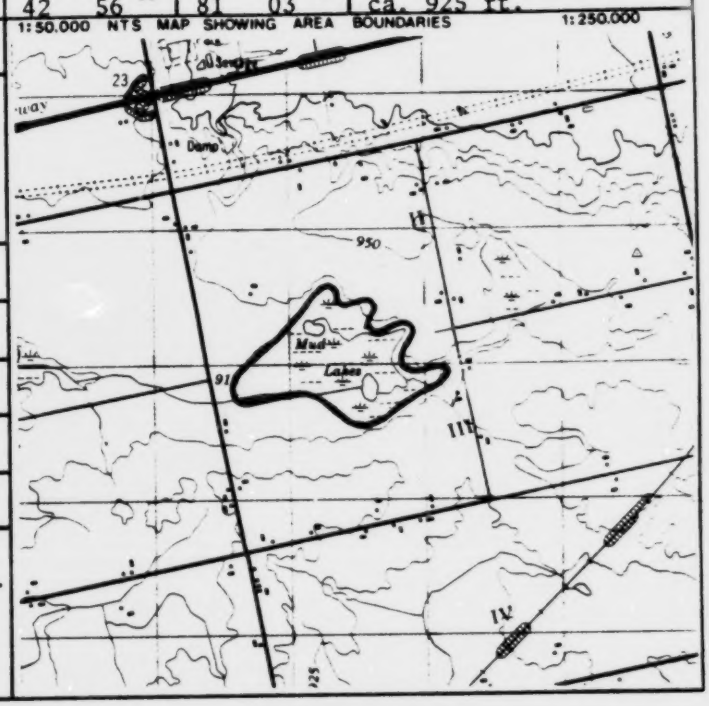
FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-6
MNR REGION AND DISTRICT	**CONSERVATION AUTHORITY**
SW-Aylmer	Upper Thames C.A.

AERIAL PHOTOGRAPHS — BASE MAP: 428811

YEAR	ROLL	FLIGHT LINE	NUMBERS
1978	210	4265	74-76

LAT.	LONG.	ALT. MIN. MAX.
42° 56' N	81° 03' W	ca. 925 ft.

1:50.000 NTS MAP SHOWING AREA BOUNDARIES 1:250.000



PHYSICAL AND BIOLOGICAL FEATURES

Mud or Dingman Lakes is a relatively large and undisturbed pond/bog complex surrounded by swamp forest and upland fringe. It lies 5.5 km south of Dorchester, near the headwaters of Dingman Creek, a tributary of the Thames River. Beech-sugar maple-white ash upland forest, silver maple-tamarack-yellow birch and silver maple-black ash-elm swamps, edge two central depressions, one of which is a pond. The other is a large graminoid *Sphagnum* bog fringed with marsh and willow-dogwood thickets. It is the only bog that exhibits this type of vegetation in Middlesex County (Small, 1978). The bog encircles a small section of open water with aquatic vegetation such as cattail (*Typha latifolia*), larger blueflag (*Iris versicolor*), broad-leaved arrowhead (*Sagittaria latifolia*) and fragrant waterlily (*Nymphaea odorata*).

Disturbance to this wetland complex is minimal. Agricultural fields surround it and a drainage ditch runs through the southern portion, south of the graminoid bog.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION		SUMMARY SPECIES LISTS	
VEGETATION SUMMARY		PHYSICAL FEATURES MAP	
EVALUATION SHEET		VEGETATION MAP	
COMMUNITY DESCRS.		BIBLIOGRAPHY	
COMMUNITY COMP. LISTS		PHOTOGRAPHS	

MAJOR INFORMATION SOURCES

Hanna, 1980. Airphoto Interpretation; IBP, 1971; M.N.R. Sensitive Area Files; Small, 1978.

EVALUATION AND PRIORITIES

The Mud Lakes area represents a relatively large and undisturbed, moderately diverse pond/bog wetland complex containing graminoid bog, a vegetation type which is rare in this region.

DATE COMPILED	COMPILER
10 May 1982	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

SITE DISTRICT 7-6: WETLANDS - Pond/Bog Complexes

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Trotters Lake	Woodstock	40P/2	280820

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Oxford

LAT.: 43° 11'N | LONG.: 80 ° 39 'W | ALT. MIN. MAX.: ca. 975 ft.

LOCALITY: 4 km southeast of Innerkip

TOWNSHIP LOTS CONCESSIONS: Blanford Township

AREA: ca. 250 acres ca. 100 ha

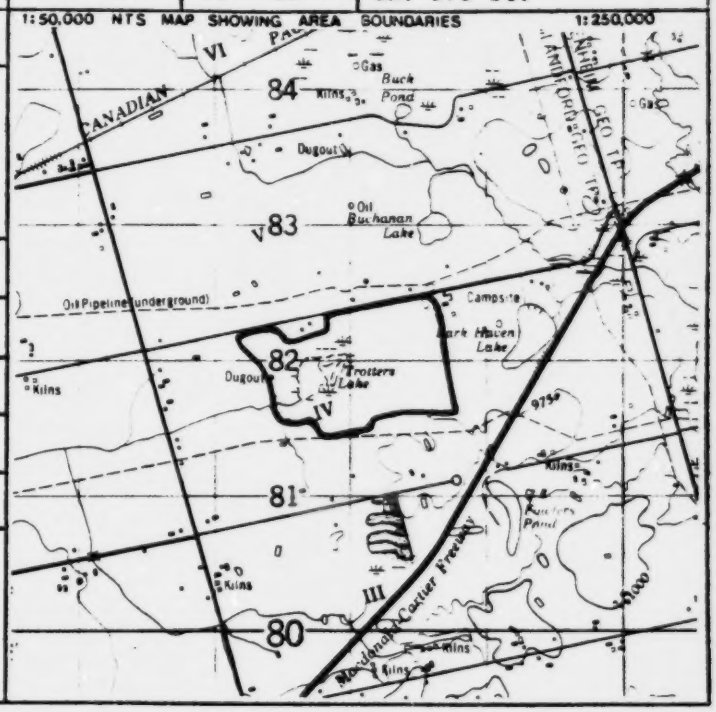
OWNERSHIP:

ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
L-1	7-6
MNR REGION AND DISTRICT	CONSERVATION AUTHORITY
SW - Aylmer	Upper Thames

AERIAL PHOTOGRAPHS — BASE MAP:

YEAR	ROLL	FLIGHT LINE	NUMBERS
1972	2	4308	7-9



PHYSICAL AND BIOLOGICAL FEATURES

Trotters Lake, lying 4 km southeast of Innerkip, is a marsh/bog complex surrounded by swamp and upland forest. A large central pond contains bulrush marsh in some sections. The *Sphagnum* - leatherleaf - water-willow (*Decodon verticillatus*) bog fringe is surrounded by dogwood - willow - winterberry (*Ilex verticillata*) - mountain holly (*Nemopanthus mucronatus*) thickets, swamp and trembling aspen - red maple - sugar maple - yellow birch forest. The site is surrounded by agricultural fields.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hanna, 1980. Airphoto Interpretation; M.N.R. Sensitive AReas Files; Oxford ESA, 1976.

EVALUATION AND PRIORITIES

Due to its relatively undisturbed nature, good diversity of pond/bog vegetation and relatively large size, Trotters Lake was selected as a candidate nature reserve.

DATE COMPILED	COMPILER
December 12,1980	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Cranberry Bog Park Reserve	Galt	40P/8	528935

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Waterloo

LOCALITY: 7km south of Galt

TOWNSHIP / LOTS / CONCESSIONS: North Dumfries Township

AREA: ca. 110 acres ca. 45 ha

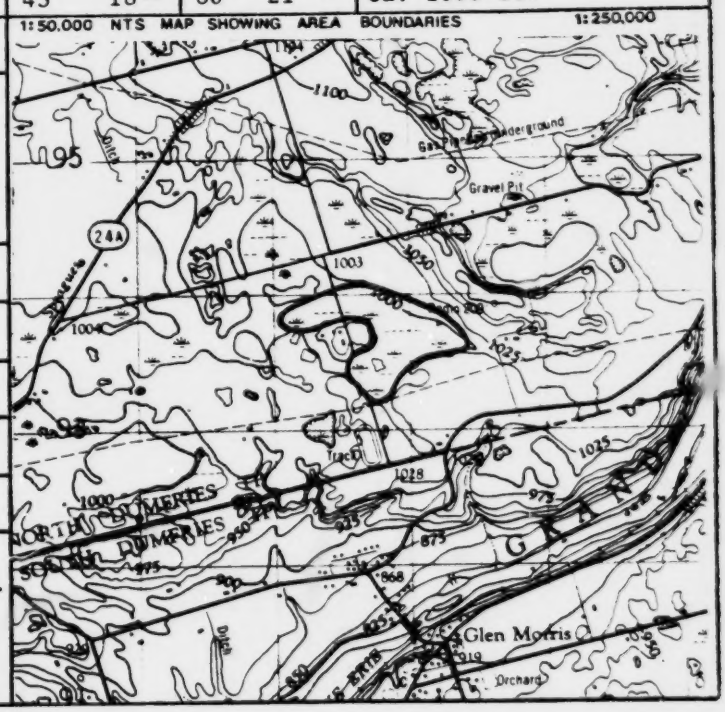
OWNERSHIP: MNR/Grand River C.A./private

ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-6
MNR REGION AND DISTRICT	**CONSERVATION AUTHORITY**
Central-Cambridge	Grand River

LAT.	LONG.	ALT. MIN. MAX.
43° 18'N	80° 21'W	ca. 1000 ft.

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



AERIAL PHOTOGRAPHS — BASE MAP:

YEAR	ROLL	FLIGHT LINE	NUMBERS
1978	63	4321	30-32
1978	21	4313	64-66
1978	32	4313	91-93

PHYSICAL AND BIOLOGICAL FEATURES

A large horseshoe shaped kettle hole encircled by an upland forest fringe along its southern edge characterizes Cranberry Bog. Located 7 km south of Galt, it contains open water, bulrush marsh, leatherleaf low shrub and graminoid bog and willow-buttonbush shrub thickets. Due to rising water levels over the past 8-10 years, Cranberry Bog has gradually changed from open bog/fen to open water marsh with some floating bog mat. A concession road dissects the northwestern arm of the bog. In the past, local residents harvested the often plentiful crop of cranberries. Regionally and provincially (Argus and White, 1977) rare plants include white beak-rush (*Rynchospora alba*) and Ohio goldenrod (*Solidago ohioensis*), respectively.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hanna, 1980. Airphoto Interpretation; Lindsay, 1980; IBP, 1971; M.N.R. Sensitive Areas Files; Waterloo, E.S.A., 1976.

EVALUATION AND PRIORITIES

Despite the change in water levels, Cranberry Bog still offers a good example of relatively undisturbed kettle bog/pond vegetation with some upland fringe.

DATE COMPILED	COMPILER
December 12, 1980	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

ONTARIO NATURE RESERVES PROGRAM - LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Oliver's Bog	Galt	40P/8	580974

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Waterloo

LAT.: 43° 20'N | LONG.: 80° 17'W | ALT. MIN. MAX.: ca. 1000 ft.-1025 ft.

LOCALITY: 3km SE of Galt

TOWNSHIP / LOTS / CONCESSIONS: North Dumfries Township

AREA: ca. 50 acres ca. 20 ha

OWNERSHIP: private

ADMINSTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-6
MNR REGION AND DISTRICT	CONSERVATION AUTHORITY
Central-Cambridge	Grand River

AERIAL PHOTOGRAPHS — BASE MAP: 433802

YEAR	ROLL	FLIGHT LINE	NUMBERS
1972	23	4314	6-7

PHYSICAL AND BIOLOGICAL FEATURES

Located 3 km southeast of Galt, Oliver's Bog, a kettle bog, offers a classical successional transition from open water bog, to quaking *Sphagnum* - sedge bog fringe, to leatherleaf - cranberry (*Vaccinium macrocarpon*) shrub bog, to rosemary - black spruce - tamarack treed bog to willow - dogwood - buttonbush lag. The surrounding upland forest is dominated by red oak - red maple - white pine - witch hazel. This 6 m deep depression receives drainage from the surrounding area; an intermittent creek drains into it from the east. Numerous regionally rare plant species inhabit the area: bog club moss (*Lycopodium inundatum*), arethusa (*Arethusa bulbosa*), sedge (*Carex limosa*) and calopogon (*Calopogon pulchellus*).

A large home is located inconspicuously on top of a wooded hill near the bog's western edge. A small part of the basin was dredged for peat in 1971.

Oliver's Bog was chosen as an excellent example of a kettle bog in this site district. However, the three other candidate nature reserves selected to represent this feature (Mud Lakes, Cranberry Bog Park Reserve and Trotters Lake) rank very closely and can be considered comparable.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hanna, 1980. Airphoto Interpretation; IBP 1972; M.N.R. Sensitive Areas Files; Waterloo E.S.A., 1976.

EVALUATION AND PRIORITIES

Oliver's Bog offers excellent nature reserve potential because it demonstrates complete classical bog succession from open water to surrounding upland fringe, is relatively undisturbed and contains several regionally rare plants.

DATE COMPILED	COMPILER
December 12, 1980	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

		NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Foster Ponds	40I/14	925545

BRIEF DESCRIPTION

About 50 ha of wetland and pond community 1 km southeast of the intersection of Hwy. 401 and 74. Two ponds surrounded by open willow-dogwood-buttonbush scrub swamp grading into silver maple-black willow-red maple-black ash swamp. Northern pond has flooded bog margin (dead tamarack) and shallow bur-reed marsh. Tamarack bog in southeast corner with willow, blueberry, leafy white orchis, grass-pink and rose pogonia. Upland sugar maple-beech-ash woods (narrow band). Regeneration along northern edge.

SOURCES IBP, 1971; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation; Small, 1978.

FIELD SURVEY DATE	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 15/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

		NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Mud Lakes (=Dingman Lakes)	40I/14	965540

BRIEF DESCRIPTION

A ca. 70 ha wetland complex surrounded by maple-beech-white ash fringe. Silver maple-ash-elm and silver maple-yellow birch-tamarack surround one pond. Another depression contains an extensive floating *Sphagnum* mat dominated by grasses. This constitutes the only graminoid bog in Middlesex (Small, 1978). It is fringed by willow-dogwood thickets. A candidate nature reserve.

SOURCES IBP, 1971; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation; Small, 1978.

FIELD SURVEY DATE	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
-			September 5/80 Hanna

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		NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Trotters Lake	40P/2	280820

BRIEF DESCRIPTION

Kettle pond with a varied marsh/bog complex. Surrounded by dogwood-willow-*Ilex nemopanthus* thickets, swamp, and trembling aspen-red maple-sugar maple-yellow birch forest. About 100 ha in size. *Sphagnum-Decodon*-leatherleaf bog fringe with bulrush community around portion of pond. Four km southeast of Innerkip. Surrounded by agricultural fields. A candidate nature reserve.

SOURCES Oxford E.S.A., 1976; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY DATE	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 15/80 Hanna/Terpstra			September 5/80 Hanna

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SITE DISTRICT 7-6: WETLANDS - Pond/Bog Complexes

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Buck Pond	40P/2	285840

BRIEF DESCRIPTION
Tamarack-cedar swamp surrounding kettle pond with willow-dogwood fringe. About 25 ha in size. Four km east of Innerkip.

SOURCES Oxford ESA Study, 1976; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Fowlers Pond	40P/2	290810

BRIEF DESCRIPTION
Kettle pond surrounded by bog mat, tamarack swamp, upland maple forest and coniferous plantation. About 35 ha in size. M.N.R. Wildlife Management Area. Boardwalk to pond and dock. Adjacent to south side of Hwy. 401, 5.5 km southeast of Innerkip.

SOURCES Oxford ESA Study, 1976; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 15/80 Hanna/Terpstra			September 5/80 Hanna

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Pine Pond	40P/2	307820

BRIEF DESCRIPTION
Kettle pond surrounded by fringe of willow, sedge and grasses and mixed upland forest of cedar-yellow birch-beech. About 60 ha in size. Six km southeast of Innerkip. Surrounded by agricultural lands. Cottages and past pipeline construction. Introduction of non-native species.

SOURCES Oxford ESA Srudy, 1976. M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 15/80 Hanna/Terpstra			September 5/80 Hanna

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Little Turnbull Lake	40P/8	465920

BRIEF DESCRIPTION

Open young ericaceous bog with tamarack bog mat forming. Band of leatherleaf surrounds pond. Upland black oak-trembling aspen-hickory slopes. About 25 ha in size. One km east of Aylmer.

SOURCES

Waterloo ESA Study, 1976; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 19/80 Hanna/Terpstra			September 5/80 Hanna

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	McCrone Lake	40P/8	467933

BRIEF DESCRIPTION

Two tiny kettle ponds surrounded by bog mat of *Potentilla fruticosa*-sedges-tamarack and shallow water fringe with water lilies-bulrush. Upland red oak-red maple-sugar maple-white pine forest. About 20 ha in area. Contains some regionally rare plants. South and northeast bog edges disturbed by two dwellings, roads, clearing, garbage. Two km east of Aylmer. Part of headwaters for Cedar Creek.

SOURCES

Waterloo ESA Study, 1976; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 19/80 Hanna/Terpstra			September 5/80 Hanna

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Bannister and Wrigley Lakes	40P/8	500935

BRIEF DESCRIPTION

The largest natural marsh in the Cambridge area (about 50 ha). Open water, aquatic vegetation, marsh, willow-dogwood thickets and ash-silver maple-elm swamp. Surrounded by red oak-white pine-ash upland forest. Recently raised water levels have drowned sections of the thickets and swamp creating more open water conditions. Regionally significant bird migratory and breeding ground. Seven km southwest of Galt.

SOURCES

Waterloo ESA Study, 1976; M.N.R. Sensitive Areas Files; IBP, 1971; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 19/80 Hanna/Terpstra			September 5/80 Hanna

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EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Cranberry Bog (=Paris Bog)	40P/8	527935

BRIEF DESCRIPTION

Kettle hole (45 ha) containing low shrub and graminoid bog, marsh, shrub thickets, meadow marsh and areas of open water. Contains some regionally rare plants. Part has changed from bog to marsh over past 5 years due to change in water levels. Seven km south of Galt. A candidate nature reserve.

SOURCES

IBP, 1971; Lindsay, 1980; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interp.; Waterloo ESA, 1976.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 19/80 Hanna/Terpstra			September 5/80 Hanna

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Dean's Lake (=Long Lake)	40P/8	540945)

BRIEF DESCRIPTION

Large-clear, sandy-bottomed lake surrounded by Carolinian forest containing small wet areas. Types include mixed upland forest, several wetland plant communities, open lake, small wet depressions surrounded by fringe of dogwood-willow-*Ilex*. Four km south of Galt. About 45 ha in size. Contains some regionally rare plants.

SOURCES

Waterloo ESA Study, 1976; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
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EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Beake Pond (=Taylor's Pond)	40P/8	535905

BRIEF DESCRIPTION

Kettle pond, meadow, lowland forests, tamarack fen and floating bog edge around pond surrounded by hardwood ridge of oak-hickory-witchhazel with prairie openings. Area is about 40 ha. Contains some regionally rare plants. Area is owned by Kiwanis Club and operated as municipal day camp, 2 km south of Galt.

SOURCES

Waterloo ESA Study, 1976; M.N.R. Sensitive Areas Files.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
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SITE DISTRICT 7-6: WETLANDS - Pond/Bog Complexes

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Oliver's Bog	40P/8	580974

BRIEF DESCRIPTION

Kettle hole bog (20 ha) 3 km southeast of Galt demonstrating classical bog succession. Surrounded by upland forest of black oak-red maple-white pine. Contains some regionally significant plants. Private home located at top of hill at west edge of bog. Part of bog was being dredged for peat. A candidate nature reserve.

SOURCES

IBP, 1971; Waterloo ESA Study, 1976; M.N.R. Sensitive Area Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
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1981

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Dorchester Swamp	St. Thomas	40 I/14	980570

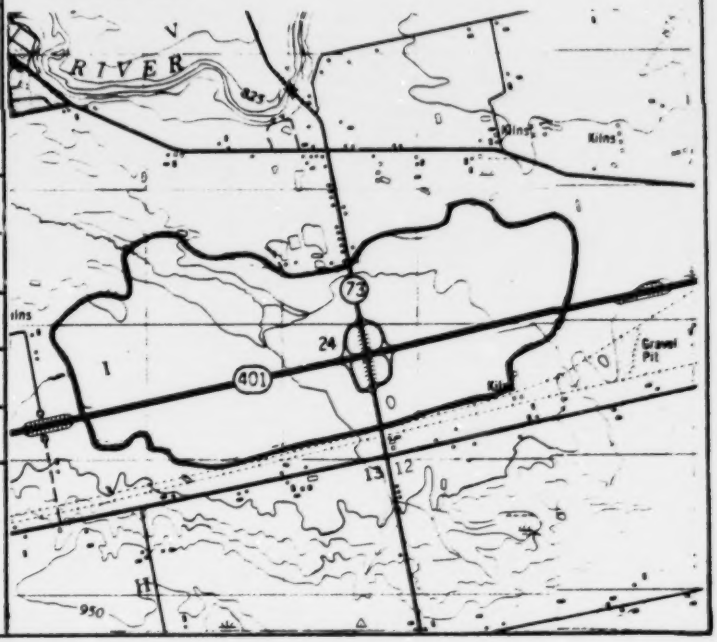
COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Middlesex

LAT. 42° 58'N | LONG. 81° 01'W | ALT. MIN. MAX. ca. 850 ft.

LOCALITY: Intersection of Hwy. 401 & 73,3 km sw of Dorchester

TOWNSHIP / LOTS / CONCESSIONS: North Dorchester Township

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



AREA: ca.930 acres ca.380 ha

OWNERSHIP:

ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7 - 6
MNR REGION AND DISTRICT	CONSERVATION AUTHORITY
SW-Aylmer	Upper Thames

AERIAL PHOTOGRAPHS — BASE MAP: 428811

YEAR	ROLL	FLIGHT LINE	NUMBERS
1972	30	4240	35-38

PHYSICAL AND BIOLOGICAL FEATURES

Dorchester Swamp is an extensive flat wooded peaty swamp located 3km southwest of Dorchester at the intersection of Hwy. 401 and Hwy 73 The dominant forest type is silver maple-yellow birch-black ash-elm-basswood with some cedar-yellow birch-tamarack, hemlock-yellow birch-sugar maple and sugar maple-beech-black cherry stands. Disturbances include the construction of highways 401 and 73 through the swamp, flooding, logging and placement of a hydro corridor through its southern end. Regionally rare plants include purple-fringed orchid (*Habenaria psycodes*), yellow lady's-slipper (*Cypripedium reginae*) and snowy orchid (*Orchis spectabilis*).

Although Dorchester Swamp is the most highly disturbed of the four areas considered, it provides a good example of the swamp vegetation typical of Site District 7-6 and a high diversity of vegetation types.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hanna, 1980. Airphoto Interpretation; M.N.R. Sensitive Areas Files; IBP, 1970.

EVALUATION AND PRIORITIES

Although Dorchester Swamp is the most highly disturbed of the four areas considered, it provides a good example of a typical swamp vegetation for Site District 7-6 and a high diversity of vegetation types.

DATE COMPILED	COMPILER
December 12, 1980	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Dorchester Swamp	40I/14	980570

BRIEF DESCRIPTION

Extensive (350 ha) flat wet wooded peaty swamp intersected by Hwy. 401 and Hwy. 73. Mainly silver maple-yellow birch-black ash-elm-basswood with cedar-yellow birch-tamarack-hemlock-yellow birch-sugar maple and sugar maple-beech-black cherry in sections. Some clearing of cedar. Twelve ha clearing in northwest section created by flooding. South section has wide hydro strip. A candidate nature reserve.

SOURCES IBP, 1970; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 15/80 Hanna/Terpstra			September 5/80 Hanna

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Benwall Swamp	40P/2	325790

BRIEF DESCRIPTION

Second largest (300 ha) natural area remaining in Oxford County. Silver maple-red maple with cedar-white birch swamp and pond. Upland sugar maple-oak-ash woods. Dissected by a concession road, with roads running south from it to active oil wells. Surrounded by agricultural lands and active oil wells. Ten km east of Woodstock, just north of Hwy. 2.

SOURCES Oxford E.S.A., 1976; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 15/80 Hanna/Terpstra			September 5/80 Hanna

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Wolverton Swamp	40P/7	330085

BRIEF DESCRIPTION

Three hundred fifty ha swamp complex, 3 km southeast of Bright. Dissected by several concession roads and a railroad. One of the largest forested spillway valleys in site district. Drained by Black Creek, a tributary of the Nith River. Mainly young forest of black ash-yellow birch-silver maple-red maple with silver maple stands, swamp scrub of dogwood-willow-meadowsweet and upland sugar maple-beech.

SOURCES IBP, 1972; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

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1981

SITE DISTRICT 7-6: WETLANDS - Swamps

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Plattsville Flats	40P/7	330920

BRIEF DESCRIPTION

Large (80 ha) floodplain swamp forest along the Nith River, 2km south of Plattsville. Elm-black ash-silver maple swamp and black maple-elm-ash floodplain forest along river. No road access.

SOURCES

Oxford E.S.A., 1976; IBP, 1972; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

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1981

SITE DISTRICT 7-6: UPLANDS/WETLANDS - Kettle-Kame Hill Complexes

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Lakeside Swamp	Lucan	40 P/3	990830

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Oxford

LAT. 43 ° 12 ′N | LONG. 81 ° 01 ′W | ALT. MIN. MAX. ca. 1175 ft. - 1225 ft.

LOCALITY: Adjacent to town of Lakeside

TOWNSHIP / LOTS / CONCESSIONS: Zorra Township

AREA: ca. 200 acres ca. 80 ha

OWNERSHIP:

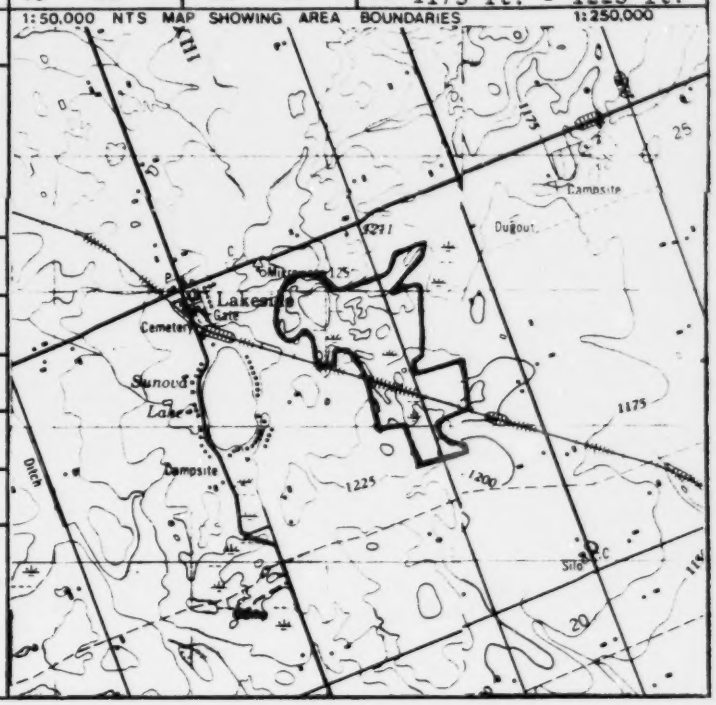
ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
L-1	7-6
MNR REGION AND DISTRICT	**CONSERVATION AUTHORITY**
SW-Aylmer	Upper Thames

AERIAL PHOTOGRAPHS — BASE MAP:

YEAR	ROLL	FLIGHT LINE	NUMBERS
1978	236	4314	235-236

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

A kettle pond, with numerous smaller ponds between kame hills characterizes Lakeside Swamp, which is located east of the town of Lakeside. The kettle pond is surrounded by buttonbush - willow - dogwood thickets and red maple - silver maple swamp; the centre is dotted with water lilies. The gently to moderately rolling hills are dominated by semi-mature sugar maple - black cherry - white ash - beech - witch hazel. Hemlock occurs in the depressions between hills. A managed beech woodlot is present. The southern tip is dissected by a railway line. Well-worn paths occur throughout the area.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hanna, 1980. Airphoto Interpretation; M.N.R. Sensitive Areas Files; Oxford E.S.A., 1976; IBP, 1972.

EVALUATION AND PRIORITIES

Lakeside Swamp offers a moderately high diversity of typical and relatively undisturbed kettle pond vegetation and upland forest types.

DATE COMPILED	COMPILER
Dec. 12, 1980	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

ONTARIO NATURE RESERVES PROGRAM - LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Chesney Bog	Woodstock	40 P/2	290860

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Oxford

LAT.: 43° 14'N | LONG.: 80° 39'W | ALT. MIN. MAX.: ca. 1000 ft.

LOCALITY: 5 km northeast of Innerkip

TOWNSHIP / LOTS / CONCESSIONS: Blenheim/Blanford Township

AREA: ca. 185 acres ca. 75 ha

OWNERSHIP:

ADMINISTRATION:

FOREST REGION AND DISTRICT: L-1

SITE REGION AND DISTRICT: 7-6

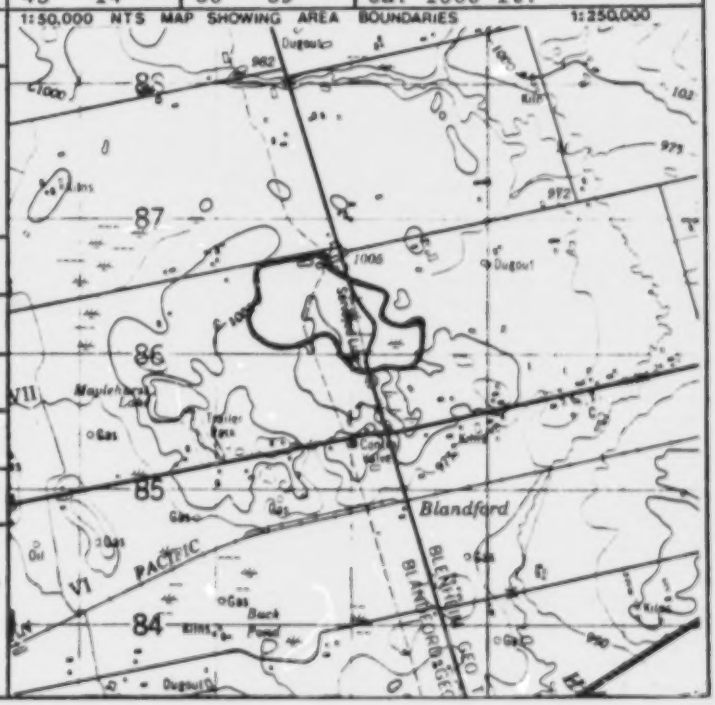
MNR REGION AND DISTRICT: Central-Cambridge SW-Aylmer

CONSERVATION AUTHORITY: Grand River

AERIAL PHOTOGRAPHS — BASE MAP: 432803

YEAR	ROLL	FLIGHT LINE	NUMBERS
1978	277	4317	9-11
1978	54	4317	351-353

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

Situated 4km northeast of Innerskip, Chesney Bog consists of a floating kettle *Sphaghnum* bog amidst low kame hills. The floating mat is composed of very wet leatherleaf - water-willow (*Decodon verticillatus*) - *Sphagnum* hummocks with marsh fern (*Thelypteris palustris*) in between. The bog mat is overtopped by an open scrub canopy of willow, dogwood, tamarack and black spruce which increase in height and density towards the edge of the bog, changing to a dense treed fringe of black spruce-tamarack-cedar-black ash. Surrounding this is a deep lag zone of dogwood-willow-cinnamon fern (*Osmonda cinnamomea*). This zone grades into red maple-elm-ash swamp. Cedar, sugar maple-hemlock and sugar maple-beech dominate the slopes and uplands of the kame hills. Two regionally uncommon plant species are arethusa (*Arethusa bulbosa*) and dewdrops (*Dalibarda repens*). The eastern arm of the bog complex is dissected by a concession road.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hanna, 1980. Airphoto Interpretation; I3P, 1971; M.N.R. Sensitive Areas Files; Oxford E.S.A., 1976.

EVALUATION AND PRIORITIES

Chesney Bog is recommended as a candidate nature reserve because it offers a good example of a relatively undisturbed kettle-kame hills complex. The kettle bog illustrates bog succession from floating sphaghnum mat, treed bog, swamp to uplands

DATE COMPILED	COMPILER
Dec. 12, 1980	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Cobble Hills	40P/3	940740

BRIEF DESCRIPTION

Best example of forested kame hills in Oxford County. Seventy ha upland maple-beech forest with silver/red maple swamp and buttonbush-willow-grasses-sedges shrub thickets and meadow marsh in depressional pockets. Ski lift in southern section. Five homes built along woodlot edge. Some local cutting.

SOURCES: IBP, 1972; Oxford E.S.A., 1976; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY DATE	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

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	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Lakeside Swamp	40P/3	990830

BRIEF DESCRIPTION

Kettle pond and uplands (80 ha) adjacent to town of Lakeside. Very rolling kame moraine with wet depressions and one large kettle pond with water lilies and surrounded by buttonbush-willow-dogwood thickets and red maple-silver maple swamp. Uplands characterized by semi-mature sugar maple-black cherry-white ash-beech-witch hazel. Managed beech woodlot. A candidate nature reserve.

SOURCES: Oxford E.S.A., 1976; IBP, 1972; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY DATE	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
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ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Chesney Bog	40P/2	290860

BRIEF DESCRIPTION

Outstanding example of kettle *Sphagnum* bog, composed of hummocks of leatherleaf-*Decodon* (no open water). Surrounded by black spruce-tamarack bog fringe and *Osmunda*-dogwood-willow bog. Additionally maple-ash swamp and cedar slope forest, maple, hemlock slope forest, upland maple-beech forest hills and aspen-hawthorn successional scrub on kame. Five km northeast of Innerkip. A candidate nature reserve.

SOURCES: IBP, 1971; Oxford E.S.A., 1976; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY DATE	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
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ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

SITE DISTRICT 7-6: UPLANDS - Till Plain

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Unopened 12th Woodlots	Woodstock	40 P/2	005765

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Oxford

LOCALITY: 7 km west of Embro

TOWNSHIP / LOTS / CONCESSIONS: Zorra Township

AREA: ca. 300 acres ca. 120 ha

OWNERSHIP:

ADMINISTRATION:

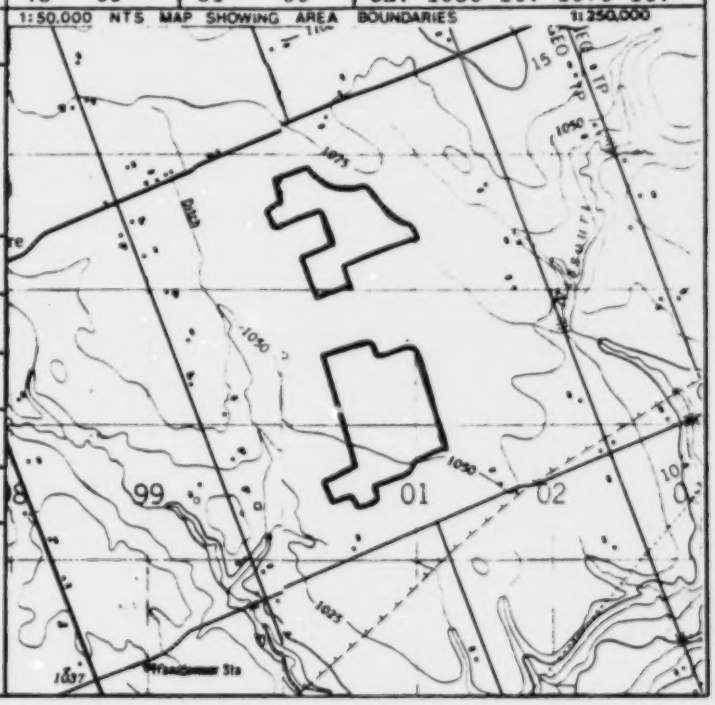
FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
L-1	7-6
MNR REGION AND DISTRICT	CONSERVATION AUTHORITY
SW-Aylmer	Upper Thames

AERIAL PHOTOGRAPHS — BASE MAP: 432804

YEAR	ROLL	FLIGHT LINE	NUMBERS
1972	3	4306	61-63

LAT.	LONG.	ALT. MIN. MAX.
43° 09'N	81° 00'W	ca. 1050 ft.-1070 ft.

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

Two large upland woodlots lying 7 km west of Embro, comprise this site. These woodlots lie along the unopened 12th concession road which is only a trail. Agricultural fields surround both woodlots. The flat to gently rolling terrain supports mesic upland forest of young to intermediate-aged sugar maple-ash-beech-black cherry-red maple; the lowlying areas contain yellow birch-red maple-sugar maple-ash. Two regionally rare bird species, Cerulean Warbler and Blue-gray Gnatcatcher, nest here.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hanna, 1980, Airphoto Interpretation; M.N.R. Sensitive Areas Files; Oxford County E.S.A., 1976.

EVALUATION AND PRIORITIES

Unopened 12th Woodlots area is recommended as a candidate nature reserve because it is relatively undisturbed, larger than most woodlots in this site district and harbours a moderately high diversity of forest vegetation.

DATE COMPILED	COMPILER
Dec. 12, 1980	R. Hanna 49

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

SITE DISTRICT 7-6: UPLANDS - Spillway

SITE DISTRICT 7-6: UPLANDS - Till Plain

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Trillium Woods Provincial Nature Reserve	Woodstock	40 P/2	180677

COUNTY, DISTRICT or REGIONAL MUNICIPALITY	LAT.	LONG.	ALT. MIN. MAX.
Oxford	43 ° 04 ′N	80 ° 47 ′W	ca. 1100 ft.

LOCALITY: 1 km west of Sweaburg

TOWNSHIP	LOTS	CONCESSIONS
West Oxford Township		

AREA: ca. 25 acres ca. 10 ha

OWNERSHIP:

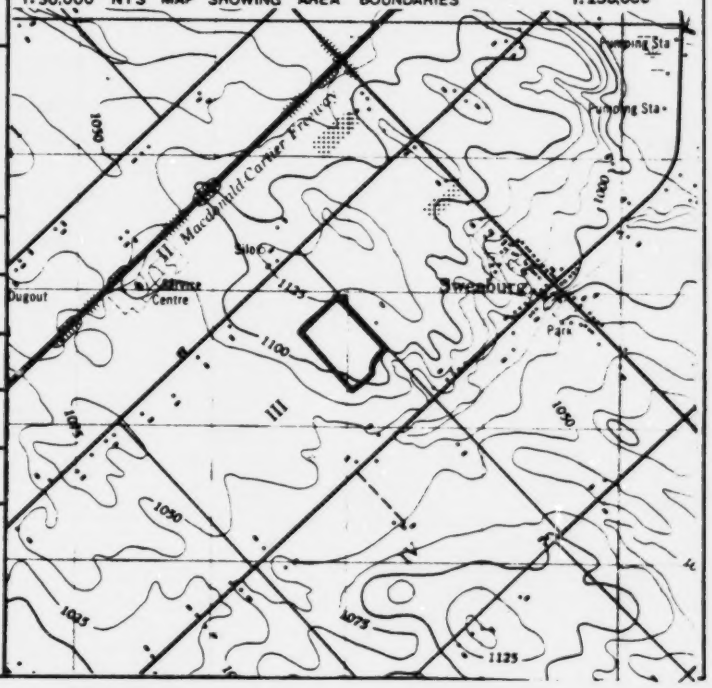
ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7 - 6
MNR REGION AND DISTRICT	**CONSERVATION AUTHORITY**
SW-Aylmer	Upper Thames

AERIAL PHOTOGRAPHS — BASE MAP:

YEAR	ROLL	FLIGHT LINE	NUMBERS
1972	13	4305	218-225
1972	42	4305	143-156

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

Trillium Woods Provincial Nature Reserve, a small upland woodlot, is located 1 km west of Sweaburg. It is surrounded by agricultural fields on three sides and a concession road on the fourth side. Young to semi-mature deciduous forest (sugar maple-white ash-black cherry-bitternut hickory-beech) covers the slopes of two drumlins. A walking trail traverses the woodlot.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hanna, 1980, Airphoto Interpretation; Lindsay, 1980; M.N.R. Sensitive Areas Files; Oxford County E.S.A., 1976.

EVALUATION AND PRIORITIES

This site offers a typical and relatively undisturbed example of till plain upland forest. Its small size though, like most of the woodlots in this area, limits its range of vegetation diversity.

DATE COMPILED	COMPILER
Dec. 12, 1980	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Khiva Conservation Forest	40P/5	475950

BRIEF DESCRIPTION

Two km northwest of Khiva. One hundred twenty-five ha of gently rolling wet mesic to mesic mixed forest of sugar maple-ash-beech with hemlock-red maple-witch hazel and pockets of wet, dead elm-ash-white birch forest. Some old field. Some logging roads and areas of active logging. Intermediate-aged forest with moss hummocks.

SOURCES

M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 14/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
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3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Ivan Woodlot	40P/3	645630

BRIEF DESCRIPTION

Sixty ha of upland/lowland woodlot, 2 km southeast of Ivan. Contains open sugar maple-ash forest with iron-wood-bitternut hickory and regenerating sugar maple and silver maple-willow wet areas. Drainage ditch through southern edge woodlot. Surrounded by agricultural fields, managed in part.

SOURCES

M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Telfer Woodlot	40P/3	670650

BRIEF DESCRIPTION

Sixty ha upland sugar maple-ash-beech woodlot (young to intermediate-aged) with silver/red maple swamp centre . Some open areas with basswood-blue beech-black cherry. Surrounded by agricultural fields. One km south of Telfer.

SOURCES

M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Unopened 12th Woodlots	40P/2	005765

BRIEF DESCRIPTION

Two upland woodlots (140 ha), 7 km west of Embro. Dissected by trail. Flat to gently rolling mesic upland forest of sugar maple-ash-beech-[illegible]ack cherry-red maple, young to intermediate in age. Some lowland yellow birch-sugar maple-red maple-ash in the wetter pockets. Cerulean Warbler and Blue-gray Gnatcatcher (rare in Oxford County) breed. A candidate nature reserve.

SOURCES

Oxford County E.S.A., 1976; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
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3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Trillium Woods Provincial Nature Reserve	40P/2	180677

BRIEF DESCRIPTION

A 10 ha provincial nature reserve, 2 km west of Sweaburg. Semi-mature sugar maple-white ash-black cherry-bitternut hickory-beech with some younger portions. Trail system. Surrounded by agricultural fields.

SOURCES

Lindsay, 1980; Oxford County E.S.A., 1976; M.N.R.Sensitive Areas Files;Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Carn's Sugar Maple Forest	40P/2	180730

BRIEF DESCRIPTION

Eleven ha of semi-mature, open, hardwood forest on till plain, lying along the upper slopes of the Thames River along deep gully. Sugar maple bush with white ash-basswood-black cherry-blue beech. Four km northeast of Beachville. Surrounded by gravel pit, reforested area, orchard, agricultural fields.

SOURCES

Oxford County E.S.A., 1976; IBP, 1971; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

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1981

SITE DISTRICT 7-6: UPLANDS - Till Plain

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Salford Woods	40I/15	120585

BRIEF DESCRIPTION

Small (50 ha) woodlot 2 km southwest of Salford, on till plain surrounded by agricultural fields. Upland sugar maple-ash (once heavily grazed, presently managed) and semi-mature sugar maple-beech. Lowland silver maple (intermediate-aged) with old drainage ditch and yellow birch-cedar swamp.

SOURCES

Oxford County E.S.A., 1976; Hanna, 1980. Airphoto Interpretation; M.N.R. Sensitive Areas Files.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

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3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

NAME	MAP NAME	MAP NUMBER	UTM REF.
Byron Woodlot	St. Thomas	40 I/14	715560

COUNTY, DISTRICT or REGIONAL MUNICIPALITY	LAT.	LONG.	ALT. MIN. MAX.
Middlesex County	42 ° 57 'N	81 ° 21 'W	ca. 850 ft.-950 ft.

LOCALITY
West of the London City Limits(Byron)

TOWNSHIP	LOTS	CONCESSIONS
Westminister Township		

AREA
ca.157 acres ca. 65 ha

OWNERSHIP

ADMINISTRATION

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-6
MNR REGION AND DISTRICT	**CONSERVATION AUTHORITY**
SW-Aylmer	Upper Thames

AERIAL PHOTOGRAPHS — BASE MAP: 428812

YEAR	ROLL	FLIGHT LINE	NUMBERS
1972	30	4240	17-18

1:50,000 N.T.S. MAP SHOWING AREA BOUNDARIES 1:250,000

PHYSICAL AND BIOLOGICAL FEATURES

Located on the outskirts of the City of London, Byron Woodlot is characterized by a moderately rolling to hilly upland forest. The site lies on the immediate western edge of a subdivision in the suburbs of Byron. Its present state of preservation is the result of an extended and ongoing negotiation by the Byron Ratepayers Assoc. and the McIlwraith Field Naturalists of London, Ontario. The area is well used by local residents as evidenced by several worn paths. A variety of vegetation types occur here: old field, lowland blue beech - beech - black cherry - shagbark hickory - red oak - red maple, upland trembling aspen - sugar maple - red oak and red oak - black cherry - shagbark hickory. The area is well known for its nesting Golden-winged Warblers, a regionally rare species.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hanna, 1980. Airphoto Interpretation; McIlwraith Field Naturalists of London, Ontario Inc.,1977; MNR Sensitive Areas Files.

EVALUATION AND PRIORITIES

Byron Woodlot is recommended as a candidate nature reserve as it contains a high quality, relatively undisturbed, diverse example of upland woods.

DATE COMPILED	COMPILER
December 12, 1980	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

SITE DISTRICT 7-6: UPLANDS - TILL MORAINE

ONTARIO NATURE RESERVES PROGRAM - LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Alps Woods (Dryden Tract)	Galt	40 P/8	500965

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Waterloo County

LAT.: 43 °19 'N | LONG.: 80 ° 23 'W | ALT. MIN. - MAX.: ca. 1050 ft. - 1150 ft.

LOCALITY: 5 km southwest of Galt

TOWNSHIP / LOTS / CONCESSIONS: North Dumfries Township

AREA: ca.245 acres ca.100 ha

OWNERSHIP:

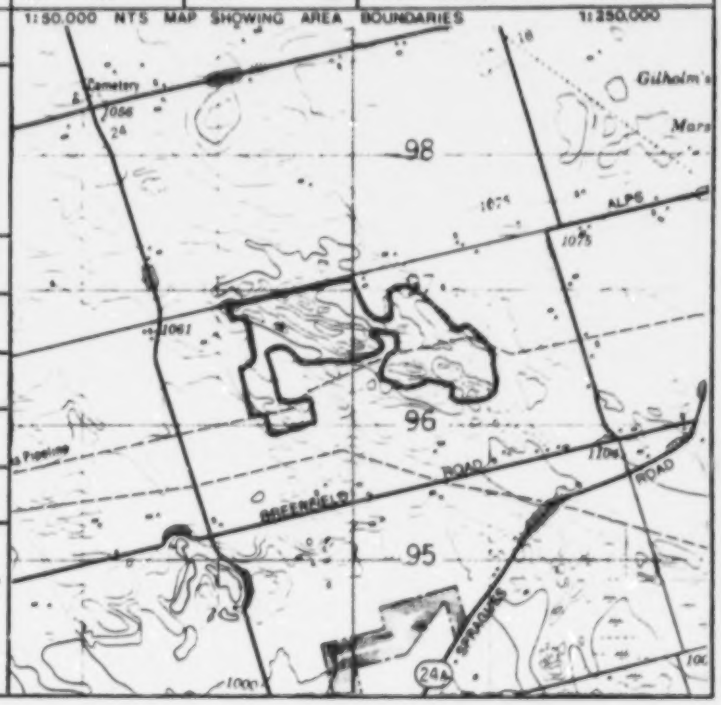
ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-6
MNR REGION AND DISTRICT	**CONSERVATION AUTHORITY**
Central-Cambridge	Grand River

AERIAL PHOTOGRAPHS — BASE MAP: 433802

YEAR	ROLL	FLIGHT LINE	NUMBERS
1972	33	4314	59-61

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

Short steep hills of red oak - white ash - red maple - sugar maple - white oak - hickory with intervening local lowlying wet areas, dominate Alps Woods which is situated 4 km southwest of Galt. The area consists of three large woodlots surrounded by agricultural fields. Some sections are managed by the Ministry of Natural Resources for oak and maple lumber production, and a partially completed dendrology trail exists. Provincially (Argus and White, 1976) and regionally rare plants include yellow mandarin(*Disporum lanuginosum*) and ebony spleenwort (*Asplenium platyneuron*). The largest colony of Cerulean Warbler in Waterloo region nests here.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hanna, 1980 Airphoto Interpretation;
MNR Sensitive Areas Files; Waterloo ESA, 1976.

EVALUATION AND PRIORITIES

Based on its relatively undisturbed and representative nature, moderate diversity of vegetation and habitat for several provincially and regionally rare plants and birds, Alps Woods is recommended as a candidate nature reserve.

DATE COMPILED	COMPILER
Dec. 12, 1980	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

		NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Byron Woodlot	40I/14	715560

Moderately rolling to hilly mesic upland forest (65 ha) just west of the city limits of Byron (London). Immediately adjacent to subdivision. Old fields, lowland blue beech-beech-black cherry-shagbark hickory-red oak-maple and upland trembling aspen-sugar maple-red oak and red oak-black cherry-shagbark hickory. A candidate nature reserve.

SOURCES: M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY DATE	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

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		NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Zenda Tract	40I/15	230600

Combination swamp and upland forest, 120 ha tract, 9 km west of Zenda. Silver maple-red maple swamp, willow-dogwood-skunk cabbage scrub with tamarack plantation and sugar maple-beech uplands (a portion of these are managed). Provincial hunting and fishing area pond in pine reforestation tract.

SOURCES: Oxford County E.S.A., 1976; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY DATE	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
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		NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Hungry Hill	40P/8	480940

Rugged undulating area with marshy pot holes. About 90 ha in size. Upland forest of red oak-hickory-maple. Ponds have open marsh zones. Three km east-northeast of Ayr. Surrounded by agricultural fields.

SOURCES: Waterloo E.S.A., 1976; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY DATE	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 19/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
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3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

SITE DISTRICT 7-6: UPLANDS - Till Moraine

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Alps Woods (Dryden Tract)	40P/8	500965

BRIEF DESCRIPTION

Short steep hills of red oak-ash-red maple-sugar maple-white oak-shagbark hickory-pignut hickory with depressions in between. One hundred ha in area. Managed by M.N.R. for oak-maple production. Trail system. Located 5 km southwest of Galt. Regionally rare plants and birds. A candidate nature reserve.

SOURCES

Waterloo E.S.A., 1976; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY DATE(S)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 19/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
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3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Spottiswood Lakes	Galt	40 P/8	500900

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Brant

LAT. 43 ° 16 'N | LONG. 80 ° 23 'W | ALT. MIN. – MAX. ca. 900 ft.-950 ft.

LOCALITY: 10 km southwest of Galt

TOWNSHIP / LOTS / CONCESSIONS: South Dumfries Township

AREA: ca. 320 acres ca. 130 ha

OWNERSHIP:

ADMINISTRATION:

FOREST REGION AND DISTRICT: D-1

SITE REGION AND DISTRICT: 7-6

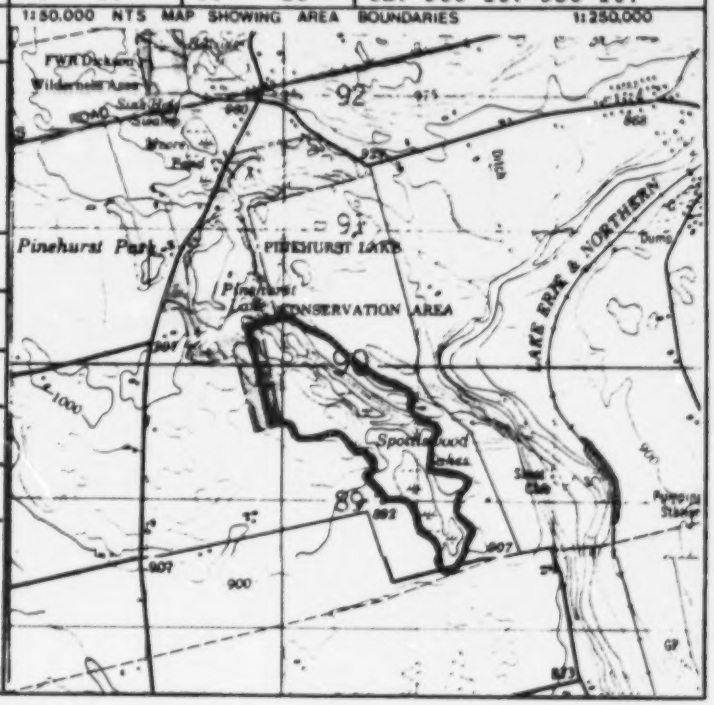
MNR REGION AND DISTRICT: Central-Cambridge

CONSERVATION AUTHORITY: Grand River

AERIAL PHOTOGRAPHS — BASE MAP: 433802

YEAR	ROLL	FLIGHT LINE	NUMBERS
1972	22	4311	23-25

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

Spottiswood Lakes consist of a series of intermittent ponds between a repeating pattern of long, narrow, high, steep-sided sand hills, 10 km southwest of Galt. The hills are vegetated with red maple-red oak-black cherry-white oak-black oak-shagbark hickory, while depressions contain dogwood-willow-buttonbush thickets and silver maple-elm-ash swamp. The pond contains a narrow leatherleaf-water willow (*Decodon verticillatus*) bog fringe.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Brant Co. ESA, 1978; Hanna, 1980 Airphoto Interpretation; IBP, 1971.

EVALUATION AND PRIORITIES

Spottiswood Lakes offers excellent nature reserve potential due to its relatively undisturbed and highly diverse nature, typical of the site district.

DATE COMPILED	COMPILER
Dec. 12, 1980	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Delaware Woodlot	40I/14	660500

BRIEF DESCRIPTION

Fifty ha of steep ridges adjacent to Thames River floodplain. Hardwood uplands dominated by beech-sugar maple-ash and red oak-white oak-basswood-witch hazel with black walnut-black maple-blue beech. Flowering dogwood and blue ash occur here. Hemlock-yellow birch-cedar-skunk cabbage slope forest. Southeast of Delaware.

SOURCES

L.T.V.C.A. E.S.A., 1977; M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 14/80 Hanna/Terpstra			September 5/80 Hanna

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PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Spottiswood Lakes	40P/8	500900

BRIEF DESCRIPTION

A series of linear steep morainic ridges with 3 ponds and several with depressional areas. One hundred thirty ha. Carolinean forest of red maple-red oak-black cherry-white oak-black oak-shagbark hickory, dogwood-willow-buttonbush wetland pockets and silver maple-elm-ash swamp. Spottiswood Lake has fringe of *Decodon* Ten km southwest of Galt. A candidate nature reserve.

SOURCES

IBP, 1971; Brant E.S.A., 1978; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 19/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Sudden Tract	40P/8	515945

BRIEF DESCRIPTION

Maple-beech forested moraine hills interpsersed with extensive wetland swamp and open water. One hundred thirty-five ha in size. Some red pine plantations. Portions actively logged. Five km southwest of Galt. Regionally rare plants.

SOURCES

Waterloo E.S.A., 1976; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 19/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF
Grand River Forests	Galt; Brantford	40P/8	520900

Also on 40P/1

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Waterloo/Brant

LAT. 43° 16'N | LONG. 80° 22'W | ALT. MIN. MAX. ca. 800 ft.-1025 ft.

LOCALITY: along the Grand River from 4 km north of Paris to Galt

TOWNSHIP / LOTS / CONCESSIONS: North Dumfires/South Dumfries Township

AREA: ca.1,635 acres ca. 755 ha

OWNERSHIP:

ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-6
MNR REGION AND DISTRICT	**CONSERVATION AUTHORITY**
Central-Cambridge	Grand River

1:50.000 NTS MAP SHOWING AREA BOUNDARIES 1:250.000

AERIAL PHOTOGRAPHS — BASE MAP: 433802

YEAR	ROLL	FLIGHT LINE	NUMBERS
1972		4310	
1972	22	4311	25-26
1972	22	4312	77-80
1972		4313	

PHYSICAL AND BIOLOGICAL FEATURES

The Grand River Forests consist of a series of terraces rising 40 m above the Grand River along an 18 km stretch from 4 km north of Paris to Galt. Orchards, fields, black ash-cedar swamp, terraced willow-black maple floodplains, a variety of slope and upland forest types (i.e. oak-hickory), perched fens, prairie, and gravelly calcareous spring-fed lagoons characterize this area. Some of the numerous regionally rare plants include sycamore, wild licorice (*Glycyrrhiza lepidota*), water-hemp (*Acnida altissima*), pondweed (*Potamogeton crispus*), red cedar (*Juniperus virgiana*), etc. Numerous species of diving and dabbling ducks winter here.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

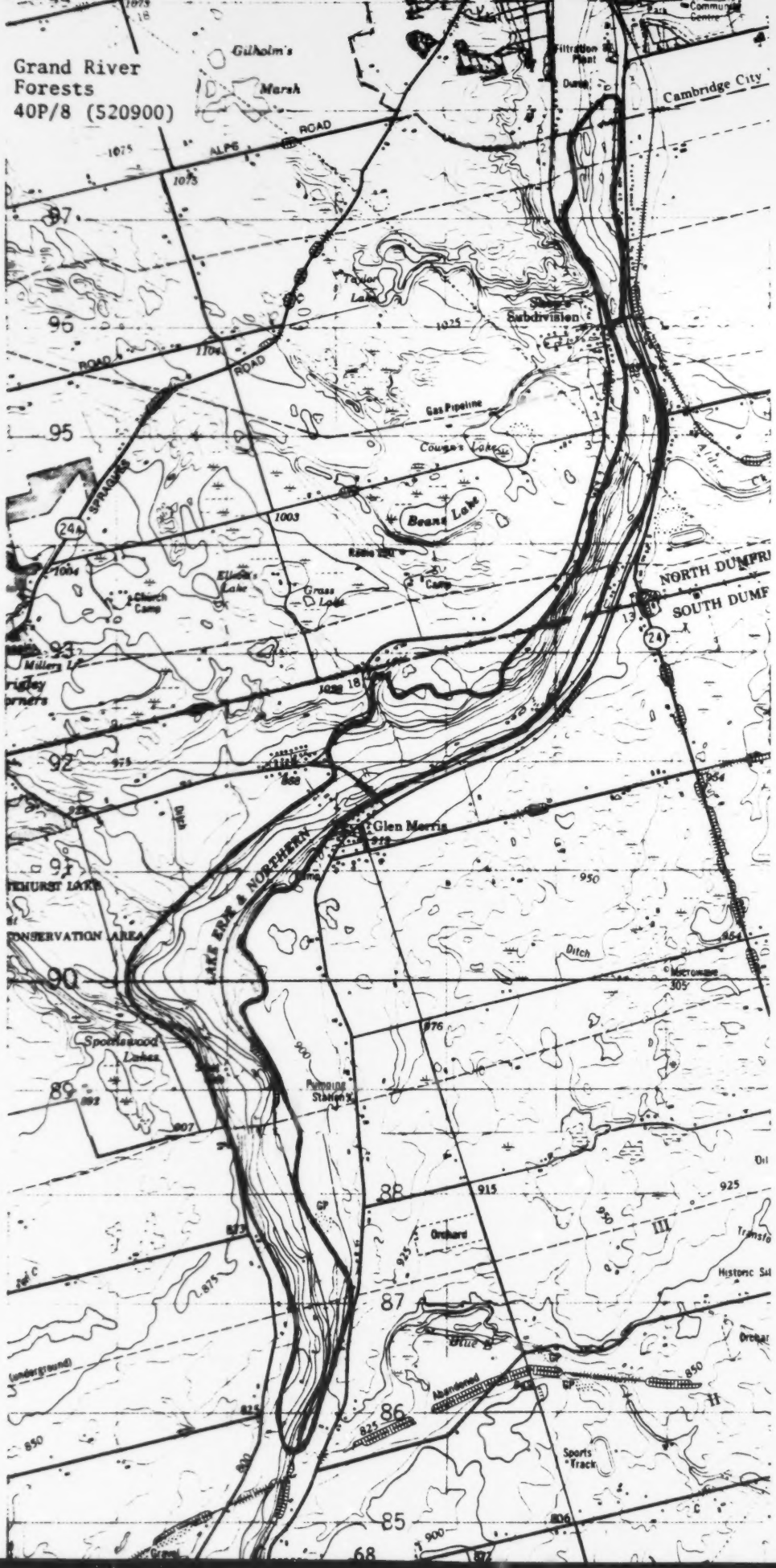
Brant Co. ESA, 1976; Hanna, 1980; Airphoto Interpretation; Waterloo ESA, 1976.

EVALUATION AND PRIORITIES

Based on its relatively undisturbed continuous nature, high diversity of vegetation types, concentrations of rare plant species, some unusual habitats such as perched fen and gravelly calcareous spring-fed lagoons, and important winter waterfowl habitat, this site is recommended as a candidate nature reserve.

DATE COMPILED	COMPILER
December 12, 1980	R. Hanna

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3


Grand River
Forests
40P/8 (520900)
Gilholm's
Marsh
ALPS ROAD
Cambridge City
Taylor Lake
Subdivision
Gas Pipeline
Cougar Lake
SPRAGUES
Beans Lake
Ellicott Lake
Grass Lake
Church Camp
NORTH DUMFR
SOUTH DUMF
Millers Lk
Glen Morris
LAKE ERIE & NORTHERN
CONSERVATION AREA
Ditch
Spotteswood Lakes
Orchard
Abandoned
Sports Track
Historic Sit
(underground)

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Komoka Park Reserve and adjacent lands	St. Thomas	40 I/14	670550

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Middlesex County

LAT. 42° 57'N | LONG. 81° 25'W | ALT. MIN. MAX. ca. 700 ft.-800 ft.

LOCALITY: Thames River between Kilworth and Komoka

TOWNSHIP / LOTS / CONCESSIONS: Lobo/Delaware Township

AREA: ca.500 acres ca.200 ha

OWNERSHIP: private/MNR

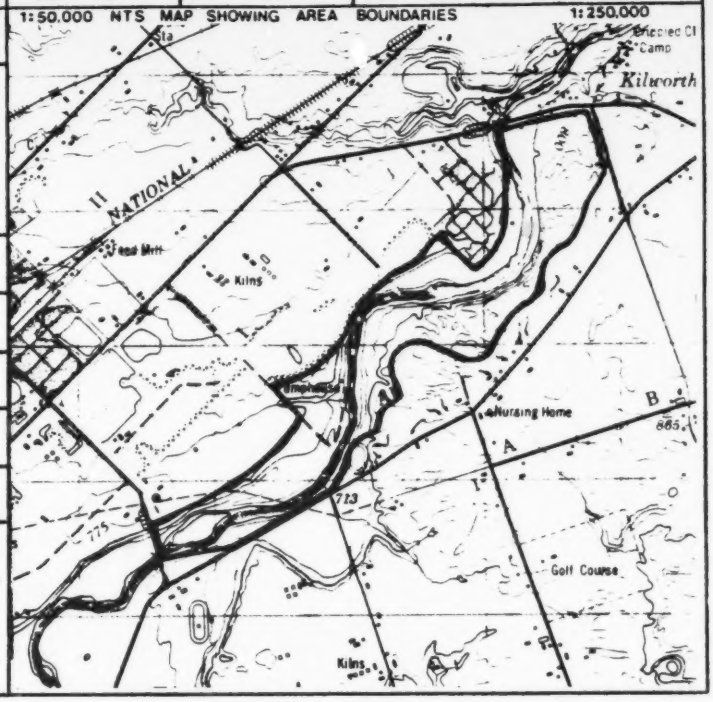
ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7 - 6
MNR REGION AND DISTRICT	**CONSERVATION AUTHORITY**
SW-Aylmer	Upper Thames

AERIAL PHOTOGRAPHS — BASE MAP:

YEAR	ROLL	FLIGHT LINE	NUMBERS
1972	12	4239	191-194
1972	30	4240	14-15

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

A forested corridor remains along both sides of the Thames River between Kilworth and Komoka. Within this corridor are a variety of habitats, ranging from river floodplains and terraces, to steep valley slopes, valley tablelands and upland woodlots. Some of the typical vegetation types include: poplar-willow floodplains, oak-hickory, oak, oak-maple-ash-white birch and hemlock upland forests, hawthorn scrub, cedar-tamarack swamps and small areas of prairie grassland.

Campbell (1977) noted that Queen Snakes have been observed near Kilworth on the Thames River. Important Queen Snake habitat may be found within the park reserve. Also of note are the records for Eastern Spiny Softshell Turtles along this stretch of the Thames River.

The Ministry of Natural Resources owns about 120 ha of this 450 ha park proposal. Much of the proposal north of the river is licensed for gravel extraction, with three pits currently in operation. A subdivision adjoins the northern floodplain near Kilworth.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hanna, 1980. Airphoto Interpretation; Lindsay, 1979; Tracey and Beechey, 1974; Hawthorne, 1978; Campbell, 1977.

EVALUATION AND PRIORITIES

Komoka Park Reserve offers a good example of a typical forested river corridor in this site district and supports a variety of relatively undisturbed vegetation types.

DATE COMPILED	COMPILER
December 12, 1980	R. Hanna and K. Lindsay

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Komoka Park Reserve and adjacent lands	40I/14	670550

BRIEF DESCRIPTION

Thames River between Kilworth and Komoka and the uplands north and south of the valley. River corridor of floodplains and terraces, steep valley slopes and upland woodlots. Poplar-willow floodplain, oak-hickory, oak, oak-maple-ash-white birch and hemlock upland forests, hawthorn scrub, cedar-tamarack swamp, prairie. Much of the park proposal north of river is licensed for gravel extraction. A candidate nature reserve.

SOURCES

Lindsay, 1979; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 14/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Kilworth Valleylands	40I/14	675567

BRIEF DESCRIPTION

Small section along Oxbow Creek near its outlet into Thames River with uplands, slope forests, and floodplains. Upland of red oak-white oak-sugar maple-witch hazel. Hemlock-cedar slope. Basswood-cedar-hemlock-black maple-blue beech, open to closed floodplain and terrace forests. Wet mesic seepage slope of sugar maple-skunk cabbage. Near Kilworth.

SOURCES

Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 15/80 Hanna/Terpstra			September 5/80 Hanna

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3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Kains Road River Valley	40I/14	700580

BRIEF DESCRIPTION

Thames River corridor terraces and upland woods along most northerly river bend west of London. Two km northeast of Kilworth. Terrace of intermediate-aged, mesic, red oak-sugar maple-ash forest with white pine-black cherry-black maple-blue beech. Gravel pit on south side may be expanding into this forested area as large section was recently cut-over. North part is slope forest, early successional forest and scrub field.

SOURCES

M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 14/80 Hanna/Terostra			September 5/80 Hanna

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	St. Ives River Valley	40P/3	855790

BRIEF DESCRIPTION
North Thames river valley between Cherry Grove and Plover Mills. Some forested slopes of ash-maple. Few homes along southeast bank. Remainder is mostly hawthorn-grape-aspen scrub and fields. One km west of St. Ives.

SOURCES M.N.R. Sensitive Areas Files; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 18/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
2nd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Nith River Forests	40P/1	485810

BRIEF DESCRIPTION
Small section of woods consisting of floodplain, slope and upland deciduous forests along Nith River, west of Paris.

SOURCES Brant E.S.A., 1976. Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 19.80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
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ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
2nd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Grand River Forests	40P/8	590900

BRIEF DESCRIPTION
Series of ridges rising 40 m from Grand River floodplain and consisting of orchards, fields, black ash-cedar swamp, terraced willow-black maple floodplains, a variety of upland and slope forests (oak-hickory), perched fens, prairie and gravelly, calcareous, spring-fed lagoons. Regionally rare plants. Important winter waterfowl habitat. Area starts 4 km north of Paris and extends to Galt. A candidate nature reserve.

SOURCES Brant E.S.A., 1976; Waterloo E.S.A., 1976; Hanna, 1980. Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
August 19/80 Hanna/Terpstra			September 5/80 Hanna

ONTARIO NATURE RESERVES PROGRAM
ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
2nd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

APPENDIX B: ADDITIONAL SITES REQUIRING EVALUATION

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Byron Bog	40I/14	735575

BRIEF DESCRIPTION

Also known as the Sifton Botanical Bog or Redmond's Pond, this kettle bog (of about 30 ha in size) lies within the City of London, 2 km northeast of Byron. It has a small open water centre fringed by a floating mat of *Sphagnum*-leatherleaf (*Chamaedaphne calyculata*) shrub bog and ringed by shrub thickets and very wet deciduous swamp. The adjacent slopes rising from the kettle are wooded with deciduous forest (oak-maple-cherry). Over fifty scientific papers have been published on aspects of the natural history of Byron Bog (Judd, 1966, 1969).

Lindsay, 1982. Airphoto Interpretation; Hilts, 1977; Hilts and Inch, 1978; IBP, 1972; Judd, 1966, 69; Sens. Areas Report, 1977.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
			Lindsay, 1982

ONTARIO NATURE RESERVES PROGRAM
ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Westminister Ponds	40I/14	820055

BRIEF DESCRIPTION

This urban natural area is centred around three kettle ponds (Walkers Pond, Spettiques Pond and Tumblesons Pond) in the southern part of the City of London, near Westminister Park. A variety of wetland types are found - cattail marsh, shrub thickets, a shrub bog pond fringe (leatherleaf-tamarack) and deciduous swamp (silver maple-red maple-yellow birch), along with areas of upland forest (beech-sugar maple; aspen-poplar). Adjacent land use includes a hospital, a senior citizen's home and a former dump site. Lindsay, 1982. Airphoto Interpretation; Hilts, 1977; Hilts and Inch, 1978; IBP, 1971; McLeod, 1981; Sensitive Areas Report, 1977; Small, 1978.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
			Lindsay, 1982

ONTARIO NATURE RESERVES PROGRAM
ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO M7A 1W3

1981

APPENDIX C: DOCUMENTED SITES OF BIOLOGICAL SIGNIFICANCE

1. SITE DISTRICT 7-6: DOCUMENTED SITES OF BIOLOGICAL SIGNIFICANCE LISTED BY 1:50,000 N.T.S. MAP SHEET

1:50,000 N.T.S. maps included in Site District 7-6, listed from west to east, north to south.

40P/5
40P/4
40I/13 - no known sites with background information
40P/6
40P/3
40P/14
40P/7
40P/2
40I/15
40P/8
40P/1

LEGEND TO ABBREVIATIONS

IBP - Site studied as part of International Biological Program.

ESA - Environmentally sensitive area identified in a report for a regional municipality, county or conservation authority.

1. Brant County E.S.A.
2. Oxford County E.S.A.
3. Lower Thames Valley Conservation Authority.
4. Waterloo County E.S.A.
5. Hamilton-Wentworth Region, E.S.A.

SA - Ontario Ministry of Natural Resources Sensitive Areas.

INT - Ontario Ministry of Natural Resources Internal Reports.

OTHER - Other sources of information.

40P/5 GRAND BEND	UTM GRID REFERENCE	INFORMATION SOURCE
Khiva Conservation Woodlot	475950	IBP,SA
Centralia Woodlot	573890	SA
40P/4 PARKHILL		
West McGillivray Woodlot	515820	SA
Brimsley Woodlot	558850	SA
Coldstream Woodlot	575637	SA
40P/6 ST. MARY'S		
Dr. Murray's Forest Plantation	952905	SA
Wildwood Lake	000800	ESA_2
40P/3 LUCAN		
Maple Lodge Woodlot	630780	SA
Ivan Woodlot	645630	SA
Ilderton South Woods (Vanneck Area Woodlots)	645690	SA
Lucan Crossing Woodlot	645800	SA
Denfield Woodlot	660750	SA
Lucan Woodlot	668800	SA
Telfer Woodlot	670650	SA
Elginfield Woodlot	715790	SA
Devizes Woodlot	789788	SA
St. Ives Woodlot	850790	SA
Thorndale Woodlot	860720	SA
Wyton Station Woodlot	880678	SA
Cobble Hills	940740	IBP,SA,ESA_2
Medina Bush	966805	ESA_2
Thamesford Woodlot	970630	SA
Mediana Blueberry Bush	970800	SA
Sunova Swamp	980809	SA,ESA_2
Trout Creek Valley	980880	SA
Kintore Swamp	990785	SA,ESA_2
Lakeside Swamp (Lost Concession)	990830	IBP,SA,ESA_2
40I/14 ST. THOMAS		
Springer's Creek Woodlot	655585	SA
Delaware Woodlot	660500	SA,ESA_3
Komoka Park Reserve	660550	
Komoka Bridge Woodlot	665535	SA
Kains Road Rivervalley Forest	700580	SA
Byron Woodlot	715560	OTHER,SA
Sifton Botanical Bog (Byron Bog)	735575	IBP,SA
Westminister Ponds	820055	IBP,SA
Glanworth Woods	850445	SA
Kettle Creek Woods	860405	SA
Dingman Creek Woods	875515	SA
Foster Ponds	930545	IBP,SA
Beattie Pond	940540	SA
Dingman Ponds (Mud Lake)	960540	IBP,SA

40I/14 ST. THOMAS	UTM GRID REFERENCE	INFORMATION SOURCE
Harrietsville Station Woodlot	980530	SA
Dorchester Swamp S.	980560	SA
Dorchester Swamp N.W.	980570	IBP,SA
Dorchester Swamp N.E.	990570	IBP,SA
40P/7 STRATFORD		
Trout Creek Valley	012895	
	031914	ESA_2
Zorra Swamp	080940	SA,ESA_2
Black River Swamp (Drumbo Swamp,	080940	SA,ESA_2
Wolverton Swamp)	330890	IBP,SA
Plattsville Flats (Blind 11th)	330920	IBP,SA,ESA_2
40P/2 WOODSTOCK		
Unopened 12th	005765	SA,ESA_2
	008752	
Happy Hills	005845	SA,ESA_2
Brooksdale Forest	040870	IBP,ESA_2
Five Points Woods	060608	IBP,ESA_2
Youngsville Forest	087830	SA,ESA_2
Golspie Swamp	122746	SA,ESA_2
Folden Swamp	158655	IBP,ESA_2
Trillium Woods	180677	INT,ESA_2
Carn's Sugar Maple Forest	180730	IBP,ESA_2
Cedar Creek Source	200630	SA,ESA_2
Sweaburg Swamp	210695	ESA_2
Oxford Centre Swamp	238722	ESA_2
Thames River Valley	242810	ESA_2
County Forest	257878	SA,ESA_2
Maple Woodlot	263821	ESA_2
Vansittart Woods	266798	SA,ESA_2
	270790	
Pearce's Bush	270854	SA,ESA_2
Mitchell's Bush	270865	ESA_2
Woodpile Woods	275877	SA,ESA_2
	280872	
Maplehurst Lake	277857	SA,ESA_2
Trotter's Lake	280820	SA,ESA_2
Buchanan Lake	280830	SA,ESA_2
Buck Pond	285840	SA,ESA_2
Fowler's Pond (Lockhart Pond)	290810	SA,ESA_2
Chesney Bog (Arethusa Bog)	290860	IBP,SA,ESA_2
Pine Pond	307820	SA,ESA_2
Hogsback Area	320825	SA,ESA_2
Benwall Swamp	325790	ESA_2
Drumbo Swamp	330875	SA,ESA_2
Gobles Woods	344790	SA,ESA_2
	355790	
Burgess Swamp (Lake)	345855	SA,ESA_2
Third Concession Woods	375755	ESA_1
Upper Whiteman's Creek	380770	ESA_1
Campbell Tract	405765	ESA_1

40I/15 TILLSONBURG	UTM GRID REFERENCE	INFORMATION SOURCE
Mud Lake and Area (Don Bucknell's Place)	084567	SA,ESA_2
Salford Woods	120585	SA,ESA_2
Dereham Centre Swamp	145505	SA,ESA_2
Zenda Tract County Forest	230600	IBP,SA,ESA_2
Little Otter Creek (O.C.C.A. Forest)	232495	IBP,SA,ESA_2
Spittler Creek Woods	240500	
Norwich Junction Woods	250550	IBP,SA
	295570	IBP
40P/8 GALT		
---	430930	API
Greenfield Swamp	433937	ESA_4
Reid's Lake (Lester's Lake)	453965	IBP,SA,ESA_4
Cedar Creek Spillway and Ayr Dam	460935	ESA_4
Turnbull Lake Basin	465915	ESA_4
Little Turnbull Lake	465920	ESA_4
McCrone Lake	467933	ESA_4
Turnbull Lake	470905	SA
Charlie Lake	475890	ESA_1
Hungry Hill	480940	ESA_4
Dickson Wilderness Area	490922	IBP,SA,ESA_4
Pinehurst Conservation Area Sand Ridges (Pinehurst Lake Complex)	500900	IBP,ESA_1
Bannister Lake Conservation Area (Bannister, Wrigley Lakes)	500935	IBP,SA,ESA_4
Alp's Woods (Dryden Alp's Sand Tract, Hills)	500966	IBP,SA,ESA_4
Rich Woods	505920	ESA_1
Millers Lake	505930	ESA_4
Spottiswood Lakes	510895	IBP
Grand River North	510900	ESA_1
Upper Glen Morris Rd	513930	ESA_4
Sudden Tract	515945	ESA_4
Upper Glen Morris	521923	ESA_1
Paris Cranberry Bog (Grass Lake)	527935	INT,IBP,SA,ESA_4
Lower Glen Morris	540895	SA,ESA_1
Grand River	540920	SA
Dean's Lake (Long Lake)	540945	SA,ESA_4
Taylor's Lake (Beake Pond)	545965	ESA_4
East River Bank by "Footbridge"	555962	ESA_4
West River Bank "Footbridge and Islands"	555970	ESA_4
West River Bank below "Footbridge and Islands"	556945	ESA_4
Brant County Forest	560900	ESA_1
Bruce's Forest	572900	ESA_1
Branchton Swamp and Woods	575945	ESA_4
	590950	
Oliver's Bog (Little's Corners)	580974	IBP,SA,ESA_4
Beverly Sparrow Field-Hyde and Rockton Tracts	687973	ESA_5
Rockton Wetland	710960	ESA_5
Westover	720985	SA
Donald Farm Wetland	760940	ESA_5
Forestry and Wildlife Area	775985	ESA_5

40P/1 BRANTFORD	UTM GRID REFERENCE	INFORMATION SOURCE
Quittkat Forest	415740	ESA_1
Campbell Tract	415765	ESA_1
Canning Area	430815	SA, ESA_2
Mud Creek	450799	ESA_1
Horseshoe Valley	466783	ESA_1
Charlie Lake	474886	ESA_1
Prothonotary Pond	480871	ESA_1
Nith River Forest	485820	ESA_1
German School Road Forest	542856	ESA_1
Blue Lake	542869	ESA_1
30M/5 HAMILTON		
Hayesland Forestry and Wildlife Area	812998	ESA_5

2. SITE DISTRICT 7-6: DOCUMENTED SITES OF BIOLOGICAL SIGNIFICANCE LISTED BY PHYSIOGRAPHIC REGION (Chapman and Putnam, 1973)

Physiographic Regions within 7-6:

Mount Elgin Ridges
Oxford Till Plain
Stratford Till Plain
Horseshoe Moraines
Caradoc Sand Plains
Flamborough Plain
Norfolk Sand Plain
Waterloo Hills
Huron Slope

MOUNT ELGIN RIDGES

40I/14 PARKHILL	UTM GRID REFERENCE	INFORMATION SOURCE
Byron Woodlot	715560	OTHER,SA
Westminister Ponds	820550	IBP,SA
Glanworth Woods	850445	SA
Kettle Creek Woods	860405	SA
Dingman Creek Woods	875515	SA
Foster Ponds	930545	IBP,SA
Beattie Pond	940540	SA
Dingman Ponds (Mud Lake)	960540	IBP,SA
Harrietsville Station Woodlot	980530	SA
Dorchester Swamp S.	980560	SA
Dorchester Swamp N.W.	980570	IBP,SA
Dorchester Swamp N.E.	990570	IBP,SA
40P/2 WOODSTOCK		
Cedar Creek Source	200630	ESA_2
Sweaburg Swamp	210695	ESA_2
Oxford Centre Swamp	238722	ESA_2
Vansittart Woods	266798 270790	SA,ESA_2
Trotter's Lake	280820	SA,ESA_2
Buchanan Lake	280830 286830	SA,ESA_2
Fowler's Pond (Lockhart Pond)	290810	SA,ESA_2
Pine Pond	307820	SA,ESA_2
Hogsback Area	320825	ESA_2
Benwall Swamp	325790	ESA_2
Gobles Woods	344790 355790	SA,ESA_2
Burgess Swamp (Lake)	345855	SA,ESA_2
Third Concession Woods	375755	ESA_1
Upper Whiteman's Creek	380770	ESA_1
Campbell Tract	405765	ESA_1

40I/15 TILLSONBURG	UTM GRID REFERENCE	INFORMATION SOURCE
Mud Lake and Area (Don Bucknell's Place)	084567	SA, ESA_2
Salford Woods	120585	SA, ESA_2
Dereham Centre Swamp	145505	SA, ESA_2
Zenda Tract County Forest	230600	IBP, SA, ESA_2
Spittler Creek Woods	250550	IBP, SA
Norwich Junction Woods	295570	IBP
40P/1 BRANTFORD		
Campbell Tract	415765	ESA_1

OXFORD TILL PLAIN

40P/6 ST. MARY'S	UTM GRID REFERENCE	INFORMATION SOURCE
Wildwood Lake	000880	ESA_2
40P/3 LUCAN		
Wyton Station Woodlot	880678	SA
Cobble Hills	940740	IBP, SA, ESA_2
Medina Bush	966805	ESA_2
Thamesford Woodlot	970630	SA
Medina Blueberry Bush	970800	SA
unova Swamp	980809	SA, ESA_2
Trout Creek Valley	980880	SA
Kintore Swamp	990785	SA, ESA_2
Lakeside Swamp	990830	IBP, SA, ESA_2
40P/7 STRATFORD		
Trout Creek Valley	012895 031914	ESA_2
Zorra Swamp	080940	SA, ESA_2
Black River Swamp (Drumbo Swamp, Wolverton Swamp)	330890	IBP, SA
Plattsville Flats (Blind 11th)	330920	IBP, SA, ESA_2
40P/2 WOODSTOCK		
Unopened 12th	005765 008752	SA, ESA_2
Happy Hills	005845	SA, ESA_2
Brooksdale Forest	040870	IBP, ESA_2
Five Points Woods	060608	IBP, ESA_2
Youngsville Forest	087830	SA, ESA_2
Golspie Swamp	122746	SA, ESA_2
Folden Swamp	158655	IBP, ESA_2
Trillium Woods	180677	INT, ESA_2
Carn's Sugar Maple Forest	180730	IBP, ESA_2
Thames River Valley	242810	ESA_2
County Forest	257878	SA, ESA_2
Maple Woodlot	263821	ESA_2

40P/2 WOODSTOCK	UTM GRID REFERENCE	INFORMATION SOURCE
Vansittart Woods	266798 270790	SA,ESA_2
Pearce's Bush	270854	SA,ESA_2
Mitchell's Bush	270865	ESA_2
Woodpile Woods	275877 280872	SA,ESA_2
Maplehurst Lake	277857	SA,ESA_2
Trotter's Lake	280820	SA,ESA_2
Buchanan Lake	280830	SA,ESA_2
Buck Pond	285840	SA,ESA_2
Chesney Bog (Arethusa Bog)	290860	IBP,SA,ESA_2
Drumbo Swamp	330875	SA,ESA_2
Burgess Swamp (Lake)	345855	SA,ESA_2

STRATFORD TILL PLAIN

40P/6 ST. MARY'S		
Dr. Murray's Forest Plantation	952905	SA
40P/3 LUCAN		
Ivan Woodlot	645630	SA
Ilderton South Woods (Vanneck Area Woodlots)	645690	SA
Denfield Woodlot	660750	SA
Lucan Woodlot	668800	SA
Telfer Woodlot	670650	SA
Elginfield Woodlot	715790	SA
Devizes Woodlot	789788	SA
St. Ives Woodlot	850790	SA
Thorndale Woodlot	860720	SA
40I/14 ST. THOMAS		
Springer's Creek Woodlot	655585	SA
Sifton Botanical Bog (Byron Bog)	735575	IBP,SA

HORSESHOE MORAINES

40P/5 GRAND BEND		
Centralia Woodlot	573890	SA
40P/4 PARKHILL		
West McGillivray Woodlot	515820	SA
Brimsley Woodlot	558850	SA
Coldstream Woodlot	575637	SA

40P/3 LUCAN	UTM GRID REFERENCE	INFORMATION SOURCE
Maple Lodge Woodlot	515820	SA
Lucan Crossing Woodlot	645800	SA
40P/8 GALT		
Turnbull Lake Basin	465915	ESA_4
Little Turnbull Lake	465920	ESA_4
McCrone Lake	467933	ESA_4
Turnbull Lake	470905	SA
Charlie Lake	475890	ESA_1
Hungry Hill	480940	ESA_4
Dickson Wilderness Area	490922	IBP,SA,ESA_4
Pinehurst Conservation Area Sand Ridges (Pinehurst Lake Complex)	500900	IBP,ESA_1
Bannister Lake Conservation Area (Bannister, Wrigley Lakes)	500935	IBP,SA,ESA_4
Alp's Woods (Dryden Tract, Alp's Sand Hills)	500966	IBP,SA,ESA_4
Rich Woods	505920	ESA_4
Millers Lake	505930	ESA_4
Spottiswood Lakes	510895	IBP
Grand River North	510900	ESA_1
Upper Glen Morris Rd.	513930	ESA_4
Sudden Tract	515945	ESA_4
Paris Cranberry Bog (Grass Lake)	527935	INT,IBP,SA,ESA_4
Lower Glen Morris	540895	SA,ESA_1
Grand River	540920	SA
Dean's Lake (Long Lake)	540945	SA,ESA_4
Taylors Lake (Beake Pond)	545965	ESA_4
East River Bank by "Footbridge"	555962	ESA_4
West River Bank "Footbridge and Islands"	555970	ESA_4
West River Bank below "Footbridge and Islands"	556945	ESA_4
Brant County Forest	560900	ESA_1
Bruce's Forest	572900	ESA_1
Branchton Swamp and Woods	575945 590950	ESA_4
Oliver's Bog (Little's Corners)	580974	IBP,SA,ESA_4
40P/1 BRANTFORD		
Quittkat Forest	415740	ESA_1
Canning Area	415765	SA,ESA_2
Mud Creek	450799	ESA_1
Horseshoe Valley	466783	ESA_1
Prothonotary Pond	480871	ESA_1
Nith River Forest	485820	ESA_1
German School Road Forest	542856	ESA_1
Blue Lake	542869	ESA_1

CARADOC SAND PLAINS

40I/14 ST. THOMAS	UTM GRID REFERENCE	INFORMATION SOURCE
Delaware Woodlot	660500	SA,ESA_3
Komoka Park Reserve	660550	INT
Komoka Bridge Woodlot	665535	SA
Kains Rd. Rivervalley Forest	700580	SA
Sifton Botanical Bog (Byron Bog)	735575	IBP,SA

FLAMBOROUGH PLAIN

40P/8 GALT		
Beverly Sparrow Field - Hyde and Rockton Tracts	687973	ESA_5
Rockton Wetland	710960	ESA_5
Westover	720985	SA
Donald Farm Wetland	760940	ESA_5
Forestry and Wildlife Area	775985	ESA_5
30M/5 HAMILTON		
Hayesland Forestry and Wildlife Area	812998	ESA_5

NORFOLK SAND PLAIN

40P/2 WOODSTOCK		
Upper Whiteman's Creek	380770	ESA_1
Campbell Tract	405765	ESA_1
40I/15 TILLSONBURG		
Little Otter Creek (O.C.C.A. Forest)	232495 240500	IBP,SA,ESA_2
40P/8 GALT		
Donald Farm Wetland	760940	ESA_5
40P/1 BRANTFORD		
Quittkat Forest	415740	ESA_1
Campbell Tract	415765	ESA_1
Mud Creek	450799	ESA_1
30M/5 HAMILTON		
Hayesland Forestry and Wildlife Area	812998	ESA_5

WATERLOO HILLS

40P/8 GALT	UTM GRID REFERENCE	INFORMATION SOURCE
Greenfield Swamp	430930	API
Reid's Lake (Lester's Lake)	453965	IBP,SA,ESA_4
Cedar Creek Spillway and Ayr Dam	460935	ESA_4

HURON SLOPE

40P/5 GRAND BEND		
Khiva Conservation Woodlot	475950	IBP,SA

P. Terpstra, 1980

APPENDIX D: POLICY FOR AREAS OF NATURAL AND SCIENTIFIC INTEREST

Areas of Natural and Scientific Interest (ANSI) are areas of land and water containing natural landscapes or features which have been identified as having values related to protection, natural heritage appreciation, scientific study or education.

ANSI s may vary in level of significance. The most significant of these may contribute to the achievement of the Ministry's protection objective.

Where ANSI s occur on public lands managed by the Ministry, it will ensure that the land uses and activities which occur, provide for the protection of identified values.

On private lands, the Ministry will, through co-operation with others attempt to ensure that landowners are aware of significant features on their properties and seek the owners' co-operation in protecting such features. The identification of areas of natural and scientific interest on private land does not indicate an intent of the Ministry to acquire this land.

ANSI s encourage the protection of additional areas not regulated as provincial parks and provide a focus for both the public and private sectors to contribute to the protection of Ontario's natural heritage.

SOURCE: Ontario Ministry of Natural Resources, 1983. Backgrounder: Land Use Guidelines. Southwestern Region.

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